ANNUAL REPORT

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PUBLIC WORKS DEPARTMENT



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CITY OF BOSTON

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ANNUAL REPORT

OF THE

PUBLIC WORKS DEPARTMENT

FOR THE

YEAR 1927



CITY OF BOSTON
PRINTING DEPARTMENT
1928

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ANNUAL REPORT

OF THE

PUBLIC WORKS DEPARTMENT

FOR THE

YEAR ENDING DECEMBER 31, 1927.

Boston, January 1, 1928.

Hon. Malcolm E. Nichols, Mayor of Boston.

Dear Sir,— In compliance with the Revised Ordinances, the annual report of the operations and expenses of the Public Works Department for the year ending December 31, 1927, is respectfully submitted. The Public Works Department, created by Ordinances 1910, chapter 9, now chapter 27 of the Revised Ordinances of 1925, was formed by consolidating the Engineering, Water and Street Departments.

ORGANIZATION.

The department is composed of six main divisions, viz.:

Central Office.— The Central Office is composed of the accounting force of the entire department under the charge of the secretary and chief clerk.

Bridge and Ferry Division.— This division, under a division engineer, has the charge and care of all bridges used as highways which are in whole, or in part, under

the control of the city; the care and management of the ferries owned by the city, including boats, slips, drops

and buildings.

Note.—The Boston and Cambridge Division, so called, is not, strictly speaking, a division of the Public Works Department, as this work is in charge of a commission of two, one member appointed by the Mayor of Boston and the other by the Mayor of Cambridge, under the provisions of chapter 412 of the Acts of 1904; but because of the fact that the present Commissioner of Public Works is the Boston member of this commission and also because one half of the expense of this commission is defrayed by the Bridge Service, it is in this report treated as a division of this department.

Highway Division.— This division, under a division engineer, has the care of the construction, reconstruction and maintenance of roadways and sidewalks, and the care of lamps and the lighting of streets, parks and alleys.

Sanitary Division.—This division, under a division engineer, has charge of the collection and removal of ashes, garbage and refuse, street cleaning and the oiling and flushing of streets.

Sewer Division.— This division, under a division engineer, has charge of the construction of sewers,

catch-basins and waterways.

Water Division.— This division, under a division engineer, has the care of water pipes, installation of meters, water service, laying and relaying of water mains and the high pressure fire service.

GENERAL.

The more important works undertaken during the past year in the Bridge Service were the rebuilding of West Newton Street Bridge over the New York, New Haven & Hartford Railroad, and the reconstruction of the spans of Broadway Bridge over the main lines of the New York, New Haven & Hartford Railroad. These two bridges were built of steel, encased in concrete, and are of a permanent type. The traffic at Broadway Bridge is also aided greatly by the elimination of the center girder.

In the Ferry Service a new electrically operated ferry bridge, with its foundations, was constructed at the North Ferry, East Boston. This new ferry bridge, like the other electrically operated ferry bridges, has a road-

way wide enough to provide for two lines of vehicles and

also is strong enough to carry heavy trucking.

As noted in the reports for some years past, Congress Street Bridge is in very bad condition and should be rebuilt at once. Chapter 157 of the Acts of 1926 authorized borrowing \$800,000 outside the debt limit for this work, and the act has been accepted by the city.

The pile approaches to the draw span of Chelsea Bridge over the north channel of Mystic river are steadily deteriorating and should be rebuilt, preferably with steel superstructure on masonry piers. The work

would cost approximately \$1,500,000.

An appropriation has been made for the reconstruction of Columbus Avenue Bridge over the Boston & Albany Railroad tracks, the rebuilding of which should be completed in the summer of 1928.

In connection with the widening of Morton, Ashland and River streets the bridges on these streets should be

rebuilt.

In the Ferry Service two new boats should be provided in place of the old wooden vessels which are unfit for the heavy motor traffic. The two old wooden ferry bridges should also be replaced by modern electrically operated steel bridges.

The engineering force has done some work in the way of supervising construction for other services and in

giving engineering advice to other departments.

Water Division.— The continued development of areas in Dorchester, West Roxbury and Brighton has resulted in applications for 2,000 service connections which have been installed, and in the same areas about ten miles of 8-inch, 12-inch and 16-inch water mains have been laid.

The metering of service connections is practically completed. There remain now about 1,000 house service connections, existing previous to 1907, to meter. On the completion of this number, all water used will be paid for under meter rates.

The tunnel under the Boston & Albany Railroad and the Providence Division Railroad at Arlington square is completed, and there remains the laying of the 48-inch main in the tunnel and the connection with the 30-inch

main in Tremont street at Arlington square.

A total of approximately ten miles of water mains have been laid, ranging in size from 8-inch to 48-inch diameter.

The General Pipe Cleaning Company of Philadelphia cleaned 80,993 linear feet of 8-inch and 12-inch water pipes in West Roxbury, resulting in an improvement to the system both for domestic and fire protection uses.

The improvement of water pressure conditions in the higher sections of Roxbury and Dorchester is of special importance and has awaited the action of the Metropolitan District Commission toward laying a 48-inch main to the Boston line. When the Metropolitan Commission completes its work, the city will continue it to connect with the 36-inch high service main in Geneva avenue at Columbia road.

Sewer Division.— The extensive building operations throughout the outlying sections have made demands on the Sewer Division that have taxed its activities to

the extreme.

The laying out of new streets by the Board of Street Commissioners and innumerable petitions for sanitary sewers and surface drains created an enormous amount of work in the preparation of plans, specifications, etc. As a result 18 miles of sewers and 577 catch-basins were constructed. All sections of the city received attention as far as possible. A number of petitions, however, will have to await further appropriation.

A section of Stony brook has been completed, between Tollgate way and Bradeen street, and a contract has been awarded for the construction of the Porter street outlet in East Boston. The pumping station is under consideration, the pumping units receiving special attention to determine the advisability of installing two electrically operated pumps for the present steam

pumps.

Sanitary Division.— Important additions to the equipment of the Sanitary Division have been made by the purchase of several Springfield pick-up sweepers,

tractors, etc.

During the early winter the snow storms were handled with speed, the streets being opened and the snow removed with the least inconvenience to the merchants and citizens.

Six city pressure flushers and six contract flushers were employed flushing the streets,— a very satisfactory and efficient method of street cleaning. Formerly their activities were restricted to the down-town streets, but during the past year, the outlying districts have been given the benefit of the flushers.

The disposal of ashes and garbage is always a subject for debate, but as the Coleman Disposal Company's contract has four years to run, the discussion relates to the contract districts. The garbage disposal in the outside districts is not as serious as the ash and rubbish disposal. Dumping areas are becoming scarce, so much so that in a few years transportation outside the city limits will be required for this waste. This waste is increasing annually; the opportunity for disposal within the city limits is becoming less, consequently a new method will have to be considered.

Highway Division.— Forty-one streets were laid out by the Board of Street Commissioners, under chapter 393 of the Acts of 1906, and under the authority of special acts the following streets were completed:

> Dock square. Kneeland street.

The appropriation for the repair and reconstruction of streets provided for the reconstruction of the following streets:

East Boston.

Lexington street, Meridian street to Shelby street.

Charlestown.

Alford street, Main street to Malden Bridge. Medford street, Chelsea street to Main street.

City Proper.

Washington street, Dover street to Massachusetts avenue.

Brattle street and Cornhill.

Washington street, from near Brattle street to near Cornhill.

Boylston street, Berkeley street to Exeter street.

Columbus avenue, Dartmouth street to Northampton street.

Dundee street, Massachusetts avenue to Dalton street.

Longwood avenue, Brookline avenue to the Riverway. Stuart street, Huntington avenue to Dartmouth street.

West Brookline street, Warren avenue to Shawmut avenue.

Brookline avenue, Fenway to Brookline line.

Arlington street, Columbus avenue to Piedmont street. Beacon street, Massachusetts avenue to Raleigh street.

Boylston street, Tremont street across Charles street.

Broadway, Park square across Stuart street.

Church street, Columbus avenue to Stuart street. Park square, Boylston street to Columbus avenue.

Stuart street, Broadway to Columbus avenue.

East Brookline street, Washington street to Albany street.

James street.

South Boston.

A street, Congress street to Dorchester avenue. East Broadway, L street to Farragut road. Ralston street, Dorchester avenue to Boston street.

Roxbury.

Dudley street, Harrison avenue to Blue Hill avenue. Harrison avenue, East Lenox street to Warren street, and from Northampton street to East Lenox street.

Longwood avenue, Parker street across St. Alphonsus

street.

Crawford street, Warren street to Walnut avenue. Harold street, Walnut avenue to Seaver street. Quincy street, Warren street to beyond Barry street.

Dorchester.

Freeport street.

West Roxbury.

Eliot street, Centre street to Pond street.

Under the appropriation allowed for granolithic sidewalks, large areas of sidewalks were laid in Brighton, Roxbury, Dorchester and West Roxbury.

In addition to the regular maintenance appropriations of the Highway Division, special appropriations, as

follows, were made available during the year:

Granolithic sidewalks, \$50,000. Reconstructing and repairing streets by contract, \$250,000. Street signs, \$25,000.

Lighting Service.— Six hundred and fifty-three lamps of various types were installed and 151 lamps discon-

tinued during the year. At the close of business December 31 there were in operation 6,093 arc lamps, 5,532 incandescent lamps, 9,878 single mantle gas lamps and 165 single mantle fire alarm gas lamps.

APPROPRIATIONS.

The money assigned for the maintenance work of the Public Works Department during the year 1927 was derived from the income of the city raised by taxation. In December, 1926, the department estimates were submitted to the Mayor, in segregated form, who made such allowance for each item in the budget as he considered necessary and submitted them to the City Council. The total maintenance appropriations as passed by the City Council and approved by the Mayor are shown below. On another page will be found the total expenditures by each service for each item in the segregated budget:

Central Office				\$88,097 55
Bridge Service				474,651 81
Ferry Service.				547,038 06
Lighting Service				974,597 54
Paving Service				1,860,678 74
Sanitary Service				3,197,491 43
Sewer Service				
Water Service.				1,547,778 84
Total .				\$9,389,054 40

Yours respectfully,

James H. Sullivan, Commissioner of Public Works.

Expenditures Under the Maintenance Appropriation of the From January 1, 1927,

		GROUP AND ITEM.	Central.	Bridge.	Ferry.
Α.	Pers	ONAL SERVICE AS PER SCHEDULE A:			
	1.	Permanent employees	\$81,310 59	\$343,257 25	\$344,983 59
	2.	Temporary employees		17,230 20	21,564 65
	3.	Unassigned		8,086 66	8,130 34
В.	Serv	ICE OTHER THAN PERSONAL:			
	1.	Printing and binding			210 50
	3.	Advertising and posting		22 95	87 48
	4.	Transportation of persons		577 88	127 26
	5.	Cartage and freight		4 54	282 42
	6.	Hire of teams and auto trucks			2,746 00
	S.	Light, heat and power		9,871 45	8,832 29
	10.	Rent, taxes and water		336 85	131 00
	12.	Bond and insurance premiums	5 00		91 00
	13.	Communication	37 00	311 58	269 30
	14.	Motor vehicle repairs and care	224 66	1,575 52	
	15.	Motorless vehicle repairs			134 65
	16.	Care of animals			
	18.	Cleaning		14 80	36 00
	19.	Removal of ashes, dirt and garbage			
	20.	Disposal of ashes, dirt and garbage			
	21.	Removal of snow			
	28.	Expert	75 00		· · · · · · · · · · · · · · · ·
	35.	Fees, service of venires, etc	15 00	81 00	112 00
	37.	Photographic and blueprinting	192 50	1 20	
	39.	General plant	119 02	34,431 00	68,283 68
	42.	Repairing streets, etc			
C.	Equi	PMENT:			
	2.	Machinery			
	3.	Electrical			
	4.	Motor vehicles	2,626 80	6,603 40	
	5.	Motorless vehicles			
	6.	Stable			
	7.	Furniture and fittings		47 86	69 08
	9.	Office	98 00	87 08	

Several Services by Items of the Segregated Budget. to December 31, 1927.

\$5,812 75 \$1,052,429 37 \$1,729,951 26 \$396,161 34 \$901,450 18 56,272 48 74,785 48 10,138 00 1,729 30 62,857 84 146,748 32 19,972 90 32,112 82 440 00 109 30 99 75 56 85 60 00 9 50 55 50	\$4,855,356 33 181,720 11 277,908 88 859 55 292 28
56,272 48 74,785 48 10,138 00 1,729 30 62,857 84 146,748 32 19,972 90 32,112 82 440 00 109 30 99 75	181,720 11 277,908 88 859 55
	277,908 88 859 55
	859 55
56 85 60 00 9 50 55 50	909 90
	292 28
25 00 1,233 86 110 20 1,605 56 8,385 12	12,064 78
	419 30
	151,712 99
937,822 54 2,114 47 4,872 19 48,780 02 5,178 73	1,017,471 69
	7,335 58
	161 00
	7,187 48
51 84 25,832 84 37,896 20 6,192 60 17,292 11	89,065 77
	22,732 08
	11,150 92
	54,196 75
410,823 36	410,823 36
	357,164 75
	217,078 64
	1,862 90
10 00 964 00 947 00 328 30 1,354 00	3,811 30
72 50	266 20
4,973 29 11,380 37 36,734 17 30,025 74 43,645 01	229,592 28
	83,256 49
6,950 00	6,950 00
	467 61
770 11 22,906 55 19,587 26 34,691 52 21,982 01	109,167 65
2,339 83	2,339 83
	1,255 53
	200 69
77 22	692 34

Expenditures Under the Maintenance Appropriation of the From January 1, 1927,

		GROUP AND ITEM.	Central.	Bridge,	Ferry.
С.	Eqυ	IPMENT:			
	11.	Marine			\$736 08
	13.	Tools and instruments		\$2,105,52	2,331 14
	14.	Live stock			
	16.	Wearing apparel		60 91	216 73
	17.	General plant		783 13	414 28
D.	Supi	PLIES:			
	1.	Office	\$3,249 98	1,129 48	1,228 84
	2.	Food and ice		83 24	73 80
	3.	Fuel		3,363 04	68,248 42
	4.	Forage and animal			
	5.	Medical, surgical, laboratory			
	8.	Laundry, cleaning, toilet	1 70	235 74	314 21
	11.	Motor vehicle	258 81	1,294 91	
	13.	Chemicals and disinfectants		8 12	193 76
	16.	General plant		1,014 14	3,417 59
E.	MAT	ERIALS:			
	1.	Building		120 06	824 55
	2.	Highway			
	3.	Bridges	• • • • • • • • • • • • • • • • • • • •	30,837 79	
	4.	Ferries			9,695 27
	5.	Sewer			
	6.	Water			
	9.	Machinery		387 10	
	10.	Electrical		952 94	1,211 65
	13.	General plant		20 57	
F.	Speci	AL ITEMS:			
	2.	Damages			
	7.	Pensions and annuities		4,260 76	6,103 53
	11.	Workingmen's compensation		214 28	1,227 72
	Tot	al	\$88,214 06	\$469,412 95	\$552,328 81

Several Services by Items of the Segregated Budget.—Concluded. to December 31, 1927.

Lighting.	Paving.	Sanitary,	Sewer.	Water.	Totals.
					\$736 08
	\$17,560 93	\$11,139 46	\$2,335 95	\$55,034 37	90,507 37
		3,500 00			3,500 00
	4 60	95 65	983 70	264 10	1,625 69
\$3,878 00		1,657 03	3,316 29	288 40	11,010 77
186 42	5,545 77	4,157 20	1,927 71	9,614 61	27,040 01
	227 92	157 25	60 75	59 78	662 74
	13,201 30	3,379 70	50,652 11	1,774 98	140,619 55
	12,152 59	69,159 01	964 76	2,654 99	84,931 35
			11 17		11 17
	116 26	41 31	208 91	173 08	1,091 21
112 87	16,785 67	46,239 93	3,474 53	7,466 37	75,633 09
	275 00	176 47	118 14	116 71	888 20
	4,801 97	962 06	2,244 14	6,521 69	18,961 59
	2,605 37	39 68	1,878 13	79 24	5,547 03
	205,889 44	28,091 27	• • • • • • • • • • • • • • • • • • • •		233,980 71
					30,837 79
					9,695 27
			10,168 37		10,168 37
				246,943 28	246,943 28
					387 10
	122 17	193 72	438 14	958 06	3,876 68
• • • • • • • • • • • • • • • • • • • •	20,590 76	53,216 12	6,187 81	3,005 05	83,020 31
				21,542 60	21,542 60
	17,177 92	15,879 65	4,531 02	15,277 61	63,230 49
	3,907 28	15,409 71	2,818 43	4,477 05	28,054 47
\$953,642 82	\$1,860,155 10	\$3,202,528 52	\$699,708 79	\$1,483,018 23	\$9,309,009 28

Expenditures Under the Maintenance Appropriation of the From January 1, 1927,

GROUP AND ITEM.	Central.	Bridge.	Ferry.
Commissioner	\$9,000 00		
Division engineers		\$3,750 00	\$1,250 00
Engineers in charge			
Clerks and stenographers	59,075 05	3,703 47	1,500 00
Address printers			
Blueprinters	3,335 87		
Chauffeurs	1,699 67	6,442 00	385 00
Cement testers	5,200 00	 	
Chief inspectors			
Chemist and assistant			
Cashiers			2,157 94
Constables			
Captains			29,874 73
Deckhands			41,503 13
Drawtenders		231,181 77	
Draughtsman		8,016 51	
Engineers, assistants, civil		17,540 46	29,218 50
Engineers (steam)			
Electricians		1,982 10	1,852 10
Emergencymen			
Foremen, general		ļ	3,258 15
Foremen		2,258 05	
Subforemen		5,593 02	
Gatemen (ferry)			25,890 70
Instrumentmen		5,043 91	
Rodmen		655 41	
Inspectors		4,192 30	
Inspector, property	3,000 00		
Laborers, janitors, teamsters, watchman, stablemen, etc.		19,262 17	30,699 94
Mechanics		30,177 75	40,055 62
Meter readers			
Medical inspectors		200 00	100 00
Oilers and firemen			89,626 76
Quartermasters			23,584 63
Sewer gatemen, cleaners, etc			

Several Services by Items of the Segregated Budget. to December 31, 1927.

Lighting.	Paving.	Sanitary.	Sewer.	Water.	Totals.
					\$9,000 00
\$1,250 00	\$3,750 00	\$5,000 00	\$5,000 00	\$5,000 00	25,000 00
	800 00			3,675 00	4,475 00
2,704 42	33,952 44	5,213 31	7,371 23	90,079 60	203,599 52
				1,300 00	1,300 00
					3,335 87
	17,495 72	125,003 23	11,391 00	22,801 29	185,217 91
					5,200 00
	1,072 26				1,072 26
	1,100 00				1,100 00
				2,216 67	4,374 61
	2,239 15				2,239 15
					29,874 73
					41,503 13
					231,181 77
	2,103 12		5,729 51	4,200 00	20,049 14
	9,626 18	1,568 19	10,957 50	10,490 64	79,401 56
	18,656 25		12,840 32	1,721 50	33,218 07
			3,964 20		7,798 40
				32,091 66	32,091 66
	3,000 00		7,030 60		13,288 75
	22,958 57	48,525 36		27,464 48	101,206 46
	35,222 05			1,900 00	42,715 07
					25,890 70
	8,158 54		16,304 64	9,780 84	39,287 93
	1,337 30		7 67		2,000 38
1,858 33	45,571 39	143,646 24	40,545 88	52,412 39	288,226 53
					3,000 00
	622,775 07	1,300,109 67	133,351 11	247,834 80	2,354,032 76
	200,476 44	75,845 58	40,037 99	312,384 93	698,978 31
				56,976 72	56,976 72
	400 00	2,200 00	100 00	600 00	3,600 00
	7,977 00		62,185 00	1,716 00	161,504 76
					23,584 63
			32,634 38		32,634 38

Expenditures Under the Maintenance Appropriation of the From January 1, 1927,

GROUP AND ITEM.	Central.	Bridge.	Ferry.
Supervisors		\$3,258 33	
Supervisor, deputy			
Storekeepers			\$1,657 89
Superintendent and deputy			
Telephone operators			
Tollmen			22,368 50
Veterinarian			
Wharfingers		• • • • • • • • • • •	
Weighers			
Yardmasters			
Yardmen			
Permanent (Totals)	\$81,310 59	\$343,257 25	\$344,983 59
Temporary		17,230 20	21,564 65
Unassigned		8,086 66	8,130 34
Totals	\$81,310 59	\$368,574 11	\$374,678 58

Several Services by Items of the Segregated Budget.—Concluded. to December 31, 1927.

Lighting.	Paving.	Sanitary.	Sewer.	Water.	Totals.
	\$2,700 00	\$4,000 00		\$2,058 04	\$12,016 37
		3,500 00			3,500 00
		1,657 89		1,900 00	5,215 78
	2,500 00		\$3,415 90	6,358 33	12,274 23
		1,400 00		1,304 17	2,704 17
					22,368 50
	500 00	2,250 00	125 00	125 00	3,000 00
		3,516 01			3,516 01
	1,657 89	1,657 89			3,315 78
		1,657 89		1,858 12	3,516 01
	6,400 00	3,200 00	3,169 32	3,200 00	15,969 32
\$5,812 75	\$1,052,429 37	\$1,729,951 26	\$396,161 34	\$901,450 18	\$4,855,356 33
	56,272 48	74,785 48	10,138 00	1,729 30	181,720 11
•••••	62,857 84	146,748 32	19,972 90	32,112 82	277,908 88
\$5,812 75	\$1,171,559 69	\$1,951,485 06	\$426,272 24	\$935,292 30	\$5,314,985 32

The expenditures under the several appropriations for the different services for the year 1927 were as follows:

Divisions and Services.	Current Expenses.	Special Appropri- ations.	Total Expenditures.	Balance December 31, 1927.
Central Office	\$88,214 06		\$88,214 06	
Bridge Service	469,412 95	\$236,667 76	706,080 71	1 \$214,012 78
Ferry Service	552,328 81	154,084 85	706,413 66	² 238,959 1 6
Lighting Service	953,642 82		953,642 82	
Paving Service	1,860,155 10	1,836,700 79	3,696,855 89	152,195 46
Sanitary Service	3,202,528 52	42,330 00	3,244,858 52	2,464 84
Sewer Service	699,708 79	973,960 36	1,673,669 15	3 1,080,670 28
Water Service	1,483,018 23	369,855 96	1,852,874 19	189,273 09
Totals	\$9,309,009 28	\$3,613,599 72	\$12,922,609 00	\$1,877,575 61

Authorized, but not issued, \$85,000.
 Authorized, but not issued, \$50,000.
 Authorized, but not issued, \$750,000.

Cost of Maintenance of the Public Works Department Since 1918.

DIVISION AND SERVICES.	1919-20.	1920-21.	1921-22.	Special Account 1921-22.	1922-23.	1923-24.	1924-25.	1925.	1926.	1927.
Central Office	\$79,009 15	\$91,373 98	\$88,308 02	\$3,072 64	\$100,457 23	\$84,717 60	\$86,511 11	\$81,432 27	\$89,009 05	\$88,214 06
Bridge Service	363,130 05	410,216 53	392,589 05	15,805 42	382,413 98	387,220 23	426,330 81	396,596 57	445,564 07	452,916 60
Boston and Cambridge Bridges.	26,390 52	26,783 42	77 666,72	2,433 95	27,669 10	30,832 74	31,740 49	19,309 12	18,983 08	16,496 35
Ferry Service	436,687 75	574,754 54	496,836 35	21,483 31	497,091 70	498,684 78	523,527 46	472,240 69	516,316 65	552,328 81
Lighting Service	714,821 55	722,134 24	722,091 55	134,127 03	734,059 09	747,191 63	830,736 90	820,768 34	927,329 94	953,642 82
Paving Service	1,063,059 16	1,063,059 16 1,023,332 59	1,110,496 07	34,869 68	925,828 45	1,140,959 74	1,208,503 43	925,828 45 1,140,959 74 1,208,503 43 1,240,788 13	2,252,030 79	1,396,279 48
Removal of Snow	78,802 12	663,111 55	215,399 21	6,611 10	416,720 51	364,713 64	349,375 57	75,494 95	75,494 95 1,234,123 87	786,521 98
Sanitary Service	*1,265,581 65 1,508,102 71 †1,629,078 98	1,508,102 71	1,629,078 98	105,288 95	105,288 95 1,831,685 38 1,895,984 45 12,073,913 32 1,877,228 67	1,895,984 45	‡ 2,073,913 32	1,877,228 67	2,050,603 65	2,089,907 75
Sewer Service	472,713 49	616,461 55	607,043 15	25,419 60	567,758 00	605,796 63	635,928 74	592,155 15	688,876 44	699,708 79
Street Cleaning Service	607,992 26	700,031 01	640,179 28	23,637 66	627,203 22	607,583 55	592,645 85	719,296 18	696,834 10	740,599 35
Street Watering and Oiling Service.	118,014 00	186,763 20	145,454 29	491 24	122,865 88	108,842 33	79,476 90	53,420 88	51,458 88	49,375 06
Water Service	1,010,634 32 1,253,166 33 1,232,418 76	1,253,166 33	1,232,418 76	41,656 57	41,656 57 1,354,555 93 1,229,573 73 1,608,320 10 1,309,163 72 1,511,407 58	1,229,573 73	1,608,320 10	1,309,163 72	1,511,407 58	1,483,018 23
Totals	\$6,237,742 02 \$7,776,231 65 \$7,307,894 48	\$7,776,231 65	\$7,307,894 48	1	\$414,896 05 \$7,588,317 47 \$7,702,101 05 \$8,447,000 68 \$7,657,894 67 \$9,382,538 10 \$9,309,009 28	\$7,702,101 05	\$8,447,000 68	\$7,657,894 67	\$9,382,538 10	89,309,009 28

* Includes \$71,000 paid by Street Cleaning and Oiling Service.
I Includes \$92,445.71 paid by Street Cleaning and Oiling Service.
I Includes \$142,724.90 paid by Street Cleaning and Oiling Service.

Revenues, 1927.

On Account of the Public Works Department, as Per Auditor's Statement.

	~~~						
Bridge Service General R	even	ue:					
Third Payment Chels	ea 1	Bridg	ge				
South				\$25,000			
South . Chelsea Bridge North (1	Reve	ere) i		1,595	44		
Labor and material				9,694			
Junk Rent				15			
Rent				200	00		
						\$36,505	19
Chelsea Bridge South	(Q	inkin	or			•	
Fund):	(1)	IIIKIL	g				
From City of Chelsea						68,178	00
Charlestown Bridge (Sink	ing F	Fund	٠.		•	00,110	90
Rents	ing i	unu	, .			2,627	65
Broadway Bridge, Sout	h E	Roeto	'n		•	2,021	00
(Sinking Fund):	11 1	JUSUU	11				
From Boston Elevated	Rail	137037				4,000	00
Ferry Service General Re	ron!	iway	•		•	4,000	00
		ie.		\$73,308	12		
Tolls Headhouse privileges	•	•	•	300			
Denta	•	•	•	589			
Rents	•	•	•	48			
Telephone	•	•	•	92			
Cala of mantage	٠	•	•	50	00		
Sale of formula at a	•	•	•	14 995	70		
Sale of ferryboats.	•	•	•	14,835	10		
rice terries oury r.	•	•	•		00		
Junk	•	•	•	10	00	89,242	27
T. 1 G . G . 1	-					09,242	91
Lighting Service General	Rev	enue	:	<b>#</b> 400	o=		
Lighting bridges .	•	•	•	\$1,462	37		
Damage to posts .				718 8	00		
Sale of junk				8	87	0.100	0.4
						2,189	24
Paving Service General F	Rever	nue:					
Assessments				\$26,841			
Permits				26,681			
Assessments Permits Labor and material Inspectors				2,630			
Inspectors				108			
Damage to auto .				200			
Damage to signs .				63			
Gasolene , .				8			
Inspectors Damage to auto . Damage to signs . Gasolene Constructing driveway				109			
OSC OF TORICE				10			
Sale of roller				200	00		
$Carried\ forward$				\$56,852	62	\$202,743	35

$Brought\ foward$ .				\$56.852	62	\$202,743	35
Labor and material (c	han	ter 2	8	,		#===,:==	-
Revised Ordinances	101.	4)	Ο,	3,135	50		
Revised Ordinances, Rebate auto registration	n	-/	•	23	00		
Sale of material	/11	•	•	3 217	77		
Sale of material . Forfeiture on contract	•	•	•	3,217 $1,500$	00		
rorientare on contract	•	•	•	1,500	00		
Sale of horses Artificial sidewalks Rent of sign Penalty, oil and coal Rents	•	•	٠	10	UU		
Artificial sidewalks	•		٠	261	80		
Rent of sign				90 43	00		
Penalty, oil and coal				43	80		
Rents				200	00		
						65,334	49
Reconstructing and	Rep	airir	ng				
Streets by Contract:	1		0				
Forfeiture on Contract	et. (	Appr	0-				
priation)	, (.	rippi	0			600	ΩΩ
Sewer Service General Re	•		•		•	000	UU
Sewer Service General In	even	iue.		@10 669	10		
Entrance fees Labor and material Disposal of sewage	•	•	٠	\$10,662	48		
Labor and material		•	٠	1,108	85		
Disposal of sewage			•	10,300	00		
Old material Penalty on oil . Penalty on coal .				178 1,813	19		
Penalty on oil .				1,813	56		
Penalty on coal .					33		
Old sewer, West Roxbi	ırv			72	85		
Rents	5			260			
items	•	•	•			24,396	26
Sanitary Service General	Roz	700110				21,000	20
Callection of worth	rie	venue	•	<b>COS 100</b>	05		
Collection of waste Sale of manure . Sale old material .	•	•	•	\$95,182	90		
Sale of manure .	•	•	٠	2,138	18		
Sale old material .		•	٠	4	00		
Damage to wagon.	•	•		$\begin{array}{c} 12 \\ 1 \end{array}$	00		
Sale old material . Damage to wagon . Penalty on coal . Rents, Fort Hill Whar				1	39		
Rents, Fort Hill Whar	f			525	75		
,						97,864	87
Sewerage Works (Exc	clusi	ve	of			ŕ	
Assessments) Appro	pria	tion	•				
Inchestor's services	PILL		•	\$379	16		
Inspector's services Labor and materials	•	•	•	649	18		
Labor and materials	•	•	•	049	10	1.000	94
W / C : C1.D						1,028	94
Water Service General R	evei	nue:	,	<b>0000000000000000000000000000000000000</b>	0.0		
Water rates	•		,	\$3,913,117	00		
rees				7,157 2,734	13		
Off and on				2,734	00		
Labor and material				3,086	14		
Sale of material .				7,755	85		
Off and on Labor and material Sale of material . Meter tests Service pipes				288	75		
Service pipes				106.981	97		
Interest			•	2 321	65		
Interest Fire pipes	•	•		31 491	20		
The pipes	•	•	•	01,401			
Campied forward				P4 074 022	0.1	\$201 D67	21
$Carried\ fow ard$ .	•	•		\$4,074,933	04	\$391,907	91

Brought forward				\$4	.074.933	84	\$391,967 31
Board of horse				. "	546		
Damage to hydrar	$_{ m nts}$				1,364	69	
Carrying water					139	49	
Relocating pipes					7	29	
Pick holes .					287	18	
Relocating hydran	ts				1,735	66	
Thawing pipes					13	85	
Penalty on coal						20	
Repair service pipe	es, ga	tes, e	etc.		69	69	
Install fire pipes					33	34	
Rents					100	00	
Accrued interest		loan	ıs	ne-			
gotiated .					447	22	
							4,079,678 45
Total	•						\$4,471,645 76

# HIGHWAY DIVISION. Miscellaneous.

Contract.	Awarded to	Ã	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1927.
³ Dump stick on scawall, Dorchester avenue, from Congress street to Summer street, city proper.	The Rendle Corporation	Feb.	1, 1927.	Completed Feb. 28, 1927	\$910 00	\$928 72
³ Removing portion of buildings, Nos. 1 to 9 Kneeland street, city proper.	City Building Wrecking Company.		20, 1927.	20, 1927. Completed August 26, 1927.	1,495 00	1,495 00
² Resetting curbing and replacing artificial walks on Trinity place and Dartmouth street, city proper.	Henry F. Malley	May	12, 1927.	12, 1927. Completed June 4, 1927	898 40	935 97
¹ Fence, filling and slope paving in Marginal street, East Boston.	E. J. McHugh & Son	June	21, 1927.	21, 1927. Completed Sept. 21, 1927	2,760 00	3,581 07
'Grading in Ashland street, from Wood avenue to Wilmot street, and Oakland street, from Orlando street to Hebron street, Dorchester,	William J. Barry	$_{ m July}$	26, 1927.	26, 1927. Unfinished	15,750 00	14,853 75
2 Electrical installation at Highland Street Yard	Stanton Electric Company	Sept.	20, 1927.	Completed Sept. 26, 1927	2,090 00	1,776 50
¹ Grading in Morton street, from Druid street to Washington street, Dorchester.	C. Capone	Nov.	21, 1927	21, 1927 Unfinished	9,500 00	Nothing.
¹ Setting edgestones in Pilgrim road, from Brookline avenue to Short street, Roxbury.	Maplewood Construction Company.	Nov.	30, 1927.	Nov. 30, 1927. Unfinished	1,359 60	200 00
² Resetting edgestones, paving, granolithic sidewalks, etc., in Cross street, city proper.	C. M. Callahan, Inc	June	14, 1927.	June 14, 1927. Completed June 20, 1927	200 00	500 00
Electrical work, City Yard, Charlestown Bunker Hill Electric Company, May 18, 1927. Completed May 18, 1927	Bunker Hill Electric Company,	May	18, 1927.	Completed May 18, 1927	190 00	190 00

1 Advertised and awarded to the lowest bidder.
2 Unadvertised: only bidder.
2 Unidvertised: only bidder.

# BRIDGE AND FERRY DIVISION (BRIDGE SERVICE).

CONTRACT.	Awarded to	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1927.
1Rebuilding West Newton Street Bridge, over the New York, New Haven & Hartford Railroad, Boston.	A. G. Tomasello & Son, Inc	Jan. 21, 1927.	Completed June 9, 1927	\$34,135 00	\$34,850 96
² Repairing running mechanism of draw span of Chel- sea Bridge of North Channel of Mystie river.	Boston Bridge Works, Inc	Feb. 23, 1927.	Completed Feb. 23, 1927	2,000 00	1,932 79
¹ Rebuilding spans 11 and 12 of Broadway Bridge, over the New York, New Haven & Hartford Railroad, Boston.	Boston Bridge Works, Inc	Feb. 26, 1927.	Completed Oct. 10, 1927	69,628 00	68,574 20
² Repairing counterweight link and pins; adjusting shear lock, etc., of Chelsea Bridge, over South Channel of Mystic river.	Boston Bridge Works, Inc	March 11, 1927.	Completed March 14, 1927,	1,500 00	1,939 12
¹ Repairing draw fender pier, Chelsea Bridge North	The Rendle Corporation	April 4, 1927.	Completed June 14, 1927	5,177 50	4,765 44
¹ Repairing Summer Street Bridge draw and fender piers.	The Rendle Corporation	May 25, 1927.	Completed July 2, 1927	3,100 00	3,906 02
¹ Pointing masonry piers of Charlestown Bridge	M. M. Devine	June 10, 1927.	Completed Sept. 24, 1927	7,349 50	6,000 83
¹ Repaving draw span of Chelsea Bridge North	M. M. Devine	June 24, 1927.	Completed Aug. 20, 1927	9,465 50	9,708 65
1 Painting Northern Avenue Bridge	M. M. Devine	July 1, 1927.	Completed Sept. 30, 1927	7,300 00	7,300 00
¹ Repairing draw fender pier of Chelsea Bridge North,	The Rendle Corporation	Aug. 9, 1927.	Completed Oct. 6, 1927	8,105 60	10,984 01
¹ Repairing draw fender pier of Northern Avenue Bridge.	W. H. Ellis & Son Company	Aug. 11, 1927.	Completed Sept. 20, 1927	4,980 00	4,842 12
¹ Repairing Meridian Street Bridge	The Rendle Corporation	Sept. 13, 1927.	Completed Nov. 22, 1927	8,912 00	8,679 28
Repairing sidewalk and flooring of Dorchester Avenue Bridge, over Fort Point Channel.	M. M. Devine	Nov. 3, 1927.	Unfinished	6,952 50	2,396 38
² Repairing turning mechanism of Northern Avenue Boston Bridge Works, Inc Dec. Draw Bridge.	Boston Bridge Works, Inc	Dec. 15, 1927.	Unfinished	3,000 00	2,939 21

1 Advertised and awarded to the lowest bidder.

² Unadvertised; only bidder.

Contracts Made by Public Works Department From January 1, 1927, to December 31, 1927.

Hired Teams.

² Advertised and awarded to the second bidder. 1 Advertised and awarded to the lowest bidder.

SANITARY DIVISION (SANITARY SERVICE).

Dirt, Refuse and Garbage.
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Refuse
Dirt
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noving Ashes, Store Dirt, House Dirt, Ref
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Collecting and Removi

DISTRICT.	Awarded to	D ₀	Dated.	Progress of Work.	Bid Per Month.	Amount Expended in 1927.
1 East Boston	John J. Ward Company	Dec.	6, 1926.	Completed Dec. 31, 1927	\$4,228 78	\$50,745 36
¹ Brighton	Joseph P. McCabe Dec. 6, 1926. Completed Dec. 31, 1927	Dec.	6, 1926.	Completed Dec. 31, 1927	6,290 00	75,480 00
² West Roxbury Dec. 6, 1926. Completed Dec. 31, 1927	John J. Moore	Dec.	6, 1926.	Completed Dec. 31, 1927	3,991 50	47,898 00
1 Dorchester	D. M. Biggs & Co	Dec.	6, 1926.	Completed Dec. 31, 1927	18,800 00	225,600 00
¹ Hyde Park	Thomas E. Bryan	Dec.	6, 1926.	Completed Dec. 31, 1927	925 00	11,100 00
¹ Advertised and awarded to the second bidder	e second bidder.		Advertise	2 Advertised and awarded to the third bidder.	lder.	

# Contract in Force Made in Previous Years.

Amount Expended in 1927.	3345,000 00 \$345,000 00
Bid Per Year,	\$345,000 00
Progress of Work.	Unfinished
Dated.	Dec. 31, 1921.
Awarded to	Coleman Brothers, Inc
CONTRACT.	Disposal of garbage and refuse for ten years, from Coleman Brothers, Inc Dec. 31, 1921. Unfinished July 1, 1922, to July, 1932.

1 Advertised and awarded to the lowest bidder.

SANITARY DIVISION (SANITARY SERVICE).

# Miscellaneous.

CONTRACT.	Awarded to	De	Dated.	Progress of Work.	Estimated. Cost.	Amount Expended in 1927.
² Removing manure from the stables and yards in the Joseph A. Kelley Dec. 17, 1927. Completed Dec. 31, 1927	Joseph A. Kelley	Dec.	17, 1927.	Completed Dec. 31, 1927	*87 25	
*Purnishing combination motor street sprinkling and B. E. Grant Company June 7, 1927. Completed Oct. 31, 1927	B. E. Grant Company	June	7, 1927.	Completed Oct. 31, 1927	†34 00	\$59,160 00
¹ Repairing garbage dump at Fort Hill Wharf	Walsh & Co	July	8, 1927.	July 8, 1927. Completed Dec. 27, 1927	10,611 00	9,944 87
¹ Repairing garbage dump at Albany Street Yard	Walsh & Co Sept.	Sept.	9, 1927.	9, 1927. Completed Oct. 10, 1927	11,210 00	11,849 30
³ Repairing roof, etc., of North Grove Street Yard William Martin Aug.	William Martin	Aug.	24, 1927.	24, 1927. Completed Sept. 30, 1927	850 00	850 00
³ Disposal of ashes and refuse in the Charlestown Coleman Disposal Company Feb. 26, 1927. Completed Dec. 31,1927	Coleman Disposal Company	Feb.	26, 1927.	Completed Dec. 31,1927	00 006‡	9,000 00

* Per horse per year; paid to city.

Advertised and awarded to the lowest bidder.

Unadvertised; only bidder.

† Per day. ² Advertised and awarded to the highest bidder. ⁴ Advertised and awarded to the only bidder.

# BRIDGE AND FERRY DIVISION (FERRY SERVICE).

### Ferry Work.

	Awarded to	Dated.		Progress of Work.	Contract Estimated.	Amount Expended in 1927.
E. J. 1	E. J. McHugh & Son	Dec. 31, 1	31, 1926.	Completed July 31, 1927	* \$9 75	\$1,755 00
The A	The Atlantic Works		7, 1927.	Completed March 9, 1927	8,237 00	11,273 76
R. T.	Repairing hull, etc., of ferryboat "Lieutenant R. T. Green Company Jan. Flaherty."		927.	27, 1927. Completed March 10, 1927.	6,920 00	4,562 63
J. Edy Inc.	J. Edward Ogden Company, March 18, 1927. Unfinished	arch 18, 1	1 1	Unfinished	140,500 00	113,453 75
W.H	Poundations for ferry bridge, North Ferry, East W.H. Ellis & Son Company March 22, 1927. Unfinished	arch 22, 1	927.	Jnfinished	26,789 00	22,286 12
R. T.	Repairing hull, etc., of ferryboat "Ralph J. Palumbo." R. T. Green Company Ap	April 8, 1	8, 1927.	Completed May 5, 1927	10,103 25	8,200 40
The /	The Atlantic Works Ma	May 6, 1	927.	6, 1927. Completed June 3, 1927	930 00	930 00
Beth]	Bethlehem Shipbuilding Corporation, Limited. Unfinished	ine 16, 1	1   1	Unfinished	28,895 00	Nothing.
Bethl rat	Bethlehem Shipbuilding Corporation, Limited.		927.	22, 1927. Completed Aug. 6, 1927	00 008'9	9,190 00
E. J.	E. J. McHugh & Son	July 26, 1	927.	26, 1927. Completed Dec. 31, 1927	*7 00	924 00
R. T	R. T. Green Company Set	Sept. 20, 1	927.	20, 1927. Completed Nov. 17, 1927	6,270 00	9,055 59
W.H	W. H. Ellis & Son Company		11, 1927.	Unfinished	22,620 00	Nothing.
The	The Atlantic Works No	ov. 15, 1	927.	Nov. 15, 1927. Completed Dec. 12, 1927	00 906	770 10
Auto	Weighing and vending machines in ferry houses		1, 1927.	Completed Dec. 31, 1927	400 00	400 00
Advertised and awarded to the lowest bidder.	* Per day.			† Per year; paid to city.		

# Removing Snow and Ice.

District.	Contractor.	Ð	Dated.	Progress of Work.	Price Per Cubic Yard.	Price Per Cubic Expended.
¹ District No. 1	J. J. McCarthy & Co	Dec.	14, 1927.	Unfinished	\$0 55	\$0 55 Nothing.
¹ District No. 2	Leo J. Nawn, Inc	Dec.	23, 1927.	Unfinished	55	55 Nothing.
¹ District No. 3 B. E. Grant Company Dec. 23, 1927. Unfinished	B. E. Grant Company	Dec.	23, 1927.	Unfinished	55	Nothing.
¹ District No. 4	B. E. Grant Company Dec. 23, 1927. Unfinished.	Dec.	23, 1927.	Unfinished	55	Nothing.
¹ District No. 5	The Ormac Company	Dec.	14, 1927.	Unfinished	09	60 Nothing.
¹ District No. 6	A. G. Tomasello & Son, Inc	Dec.	14, 1927.	Unfinished	65	Nothing.
¹ District No. 7	John J. Loonie	Dec.	23, 1927.	Unfinished	55	Nothing.
¹ District No. 8	J. B. O'Rourke	Dec.	23, 1927.	Unfinished	20	Nothing.
¹ District No. 9 J. A. Singarella Dec. 14, 1927. Unfinished	J. A. Singarella	Dec.	14, 1927.	Unfinished	65	Nothing.
¹ District No. 10	D. M. Biggs & Co	Dec.	23, 1927.	Unfinished	20	Nothing.
¹ District No. 11	Edward J. Byrne	Dec.	23, 1927.	23, 1927. Unfinished	58	Nothing.
District No. 12. A. DeStefano & Son, Inc. Dec. 14, 1927. Unfinished	A. DeStefano & Son, Inc	Dec.	14, 1927.	Unfinished	54	54 Nothing.

¹ Invitation bids; not advertised.

# HIGHWAY DIVISION (LIGHTING SERVICE). Contract in Force Made in Previous Years.

Progress of Work. Gas Lamp	\$11 00
Progress of Wo	Unfinished
Dated.	May 20, 1924.
Awarded to	Boston Consolidated Gas Company
Contract,	Furnishing gas and for the equipment and lighting of gas Boston Consolidated Gas Company May 20, 1924.  March 31, 1934, inclusive.

¹ Advertised and awarded to the only bidder.

WATER DIVISION (WATER SERVICE). Laying and Relaying Water Pipes.

Contract.	Awarded to	Dated.		Progress of Work.	Contract Estimated.	Amount Expended in 1927.
Dock square, Faneuil Hall square and Merchants L. P. Federico & Co row, city proper.		March 29, 19	27.	March 29, 1927.   Completed April 16, 1927	\$1,468 75	\$1,203 07
Barlow street, Cedar road, Forest Hills street, Pond place, Rhoda street, Walnut road, West Roxbury Parkway, West Roxbury; Church street and Hillside street, Hyde Park, and Duxbury road, Dorchester.	John Williams	April 5, 19	27. C	5, 1927. Completed May 24, 1927	4,445 00	5,118 48
Union street, between Hanover street and Dock A. Grande square, and in Dock square, city proper.		April 15, 19	27.	April 15, 1927. Completed June 6, 1927	2,568 50	2,118 16
Southern Artery, between Washington street and John Williams Dorehester avenue, Dorchester.		May 5, 1927.		Completed May 28, 1927	2,353 75	2,446 35
Alicia road, Ormond street, Dorchester; Orange street and Sanborn avenue, West Roxbury.	N. DiBartolomeo Company		27.	6, 1927. Completed Aug. 1, 1927	2,865 50	3,129 72
Elkins street, South Boston; Sumner terrace, Uphan avenue, Wilder road, Delmont street, Blakeville street, Greenmount street, Dorchester; Grenville place, city proper.	L. P. Federico & Co May 21, 1927. Completed June 25, 1927	May 21, 19	27.	completed June 25, 1927	3,541 25	3,386 99
Southern Artery, between Dorchester avenue and Hallet street, Dorchester.	John Williams	May 26, 1927.		Completed Aug. 9, 1927	14,605 00	14,699 82
Columbine street, Hosmer street, Norfolk terrace, Owencrift road, Dorchester; Chilton road, Hodg-don terrace, New Park avenue, Parkvale road, West Saville and Wolfe streets, West Roxbury.	M. DeSisto Company May 26, 1927. Completed Aug. 6, 1927	May 26, 19	27.	Sompleted Aug. 6, 1927	4,255 00	4,562 49
Southern Artery and Owen street, Dorchester	C. Russo	June 4, 19	27.	4, 1927. Completed Aug. 8, 1927	1,203 00	1,237 52
Elbert street, Roxbury	N. DiBartolomeo Company   June		27. C	10, 1927.   Completed July 8, 1927	1,752 50	1,506 50

2,391 75	2,078 91	3,982 23	5,159 54	3,023 68	1,729 52	2,143 36	3,768 49	5,418 17	2,977 35	27,069 65
2,313 25	1,903 75	4,327 50	6,241 00	6,455 00	1,891 50	2,210 00	4,831 50	4,256 00	4,107 00	3,443 00
June 10, 1927.   Completed July 16, 1927	Completed Aug. 13, 1927	Completed Aug. 22, 1927	Completed Aug. 22, 1927	Completed Oct. 22, 1927	Completed Aug. 31, 1927	Completed Sept. 10, 1927	Completed Oct. 15, 1927	26, 1927. Completed Dec. 6, 1927	Completed Oct. 19, 1927	Completed Dec. 22, 1927
10, 1927.	28, 1927.	13, 1927.	18, 1927.	26, 1927.	3, 1927.	3, 1927.	4, 1927.	26, 1927.	31, 1927.	Sept. 15, 1927.
June	June	July	July	July	Aug.	Aug.	Aug.	Aug.	Aug.	Sept.
	A. Cefalo	L. P. Federico & Co	John Williams	Joseph Capone	M. DeSisto Company	N. DiBartolomeo Company	John Williams	A. Grande	L. P. Federico & Co	E. O'Toole Contracting Company.
¹ Lake Shore road, Brighton; Maple and Stratford   C. Struzziery streets, Woodward road, West Roxbury, and Belnel road, Hyde Park.	¹ Ashton street, Dorchester; Pleasant street, Hyde Park; Forest Hills circle, St. Joseph street and Redgate road, West Roxbury	¹ Mason and Washington streets. St. James avenue, city proper; Rangley, Gene, Ginita, Glide streets, Dorchester, and St. Peters street, West Roxbury.	¹ Beaver, Church, Cleveland streets, Durant road, Franklin street, Glenwood avenue (west), River, Roxanna streets, Shirley road, Sunnyside and Thompson streets, Hyde Park.	¹ D street, between West Second street and Old Colony Joseph Capone avenue, South Boston.	Warrenton street, between Tremont and Stuart streets, city proper.	¹ Brook road, Carroll street, Greenhill avenue, Hammatt road, Knoll street, Stella road, West Roxbury, and Hopewell road, Hyde Park.	River street, between Mattapan square and Everett square, Dorchester and Hyde Park.	¹ Adams, Butler streets, Emerson avenue, Southern Artery, Winston street, Dorchester; Metropolitan avenue, Hyde Park, and West Roxbury parkway, West Roxbury.	¹ Hubbard road, Newkirk, Flavia and Wessex streets, Dorchester; Ashley street, Seaview avenue, East Boston, and Zamora court, West Roxbury.	¹ Arlington, Providence and Reservoir streets, Hyde Park; Russett road, West Roxbury; Codman, Rockdale streets, Southern Artery and Vera street, Dorehester.

Laying and Relaying Water Pipes.— Concluded.

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Contract.	Awarded to	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1927.
Adamson, Aleorn, Beechcroft, Gardner streets, Brighton: Clarendon avenue, Cross road and Overlook road, West Roxbury.	A. Grande	Oct. 11, 1927.	Unfinished	\$6,481 00	\$4,085 95
Dyer avenue, Jacob, Nevada streets, Dorchester; Bobolink, Doncaster streets, Ferndale road, Florence street, Glen road, private land (between Glade and Glenside avenues), Westover street, West Roxbury; and Belnel road, Hyde Park.	E. O'Toole Contracting Company.	Oct. 28, 1927.	Unfinished	4,218 50	2,912 86
Grayson street, Humes road, Whitten street, Francis John Williamspark, Charlemont street, Westmoreland street extension, Dorchester, and Wesley street, South Boston.		Nov. 3, 1927.	3, 1927. Unfinished	4,036 00	2,264 56
¹ Addington road, Gretter road, Hill, Mahler, Wolfe Streets, West Roxbury; Fuller street, Dorchester, and Monroe road, Brighton.		Nov. 15, 1927.	Nov. 15, 1927. Unfinished	3,210 00	2,204 76
¹ Colwell road, Durland street, Hatherley road, John Williams Dec. Brighton, and Coleman street, Hyde Park.	John Williams		7, 1927. Unfinished	2,078 50	Nothing.
Southern Artery and Washington road, Dorchester. L. P. Federico & Co	L. P. Federico & Co	Dec. 9, 1927.	9, 1927. Unfinished	2,227 50	Nothing.
A. DeStefano & Son, Inc Dec. Roxbury, West Roxbury; Rose Garden circle, Brighton, Emerson avenue, Madison avenue and Southern Artery, Dorchester.	A. DeStefano & Son, Inc		14, 1927. Unfinished	3,941 00	Nothing.

¹ Advertised and awarded to the lowest bidder.

## Miscellaneous.

	11:11:		9 A J.		1	1 A de constant para la constant de la file de la constant de la c
1,115 63	1,575 00	Completed Dec. 19, 1927	15, 1927.	Nov.	M. DeSisto Company	'Setting hydrant, gate, blow-off and meter boxes to replace existing boxes in city proper, South Boston and Roxbury.
Nothing.	1,350 00	Unfinished	24, 1927.	Oct.	McCulloch Manufacturing Company.	⁴ Assembling 100 6-inch gate valves
Nothing.	4,787 50	Completed Dec. 15, 1927	20, 1927.	Oct.	McCulloch Manufacturing Company.	¹ Assembling 50 B. & F. post hydrants
4,812 68	5,150 00	Completed Dec. 19, 1927	30, 1927.	Sept.	L. P. Federico & Co	¹ Excavating and refilling service pipe trenches in South Boston, Roxbury, Dorchester, Brighton, West Roxbury and Hyde Park.
1,363 50	1,350 00	Completed Sept. 1, 1927	3, 1927.	Aug.	McCulloch Manufacturing Company.	⁴ Assembling 100 6-inch gate valves
5,160 08	5,130 00	Completed Sept. 15, 1927	26, 1927.	$_{ m July}$	John Williams	¹ Excavating and refilling service pipe trenches in South Boston, Roxbury, Dorehester, West Roxbury, Brighton and Hyde Park.
10,201 25	10,036 25	Completed Oct. 25, 1927	7, 1927.	July	General Pipe Cleaning Company.	¹ Cleaning water pipes in West Roxbury
2,400 00	3,250 00	Completed July 20, 1927	14, 1927.	June	Zoppo & Civitarese	¹ Excavating and refilling service pipe trenches in Roxbury, Dorchester, West Roxbury, Brighton.
2,290 80	3,175 00	Completed June 16, 1927	20, 1927.	May	John Willliams	² Excavating and refilling service pipe trenches in South Boston, Roxbury, Dorchester, West Roxbury, Brighton.
5,364 94	4,700 00	Completed Oct. 26, 1927	2, 1927.	May	McCulloch Manufacturing Company.	⁴ Assembling 50 B. & F. post hydrants
800 00	800 00	Completed March 26, 1927,	26, 1927.	Feb.	Walter H. Moreton Corpora- tion.	³ Overhauling the sterling engine in the Water Division boat "Watercrest."
\$87,977 83	\$100,000 00	Completed Nov. 30, 1927	1, 1927.	Feb.	Simpson Brothers Corporation.	² Construction of concrete tunnel with steel pipe shafts under the New York, New Haven & Hartford Railroad and the Boston & Albany Railroad at Arlington square, city proper.
Amount Expended in 1927.	Contract Estimated.	Progress of Work.	Dated.		Awarded to	Сомтваст.

¹ Advertised and awarded to the lowest bidder. ³ Only bid; not advertised.

² Advertised and awarded to the second bidder.
⁴ Advertised and awarded to the only bidder.

High Pressure Fire Service.

Amount Expended in 1927.	83,250 00 \$2,751 45				
Contract Estimated.	\$3,250 00				
Progress of Work.	Unfinished				
Dated.	Dec. 10, 1927.				
Awarded to	C. & R. Construction Company.				
Contract.	¹ Relocating high pressure hydrants in Kneeland C. & R. Construction street, between Washington and Albany streets, Company.				

¹ Invitation bids; not advertised; awarded to the lower bidder.

Area in Square Yards and Character of Pavements on Accepted Streets, January 1, 1928. Area of Pavements.

District.	Sheet Asphalt.	Asphalt Concrete.	Granite Block.	Wood Block.	Plank on Bridges.	Brick.	Concrete.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1926 report	949,017	1,421,142	2,732,658	269,233	21,112	79,956	112,210	5,629,035	461,736	898'96	11,778,967
Per cent	8.06	12.06	23.20	2.29	0.23	89.0	0.95	47.79	3.92	0.82	100.00
January 1, 1928.											
City Proper	405,001	340,785	874,798	133,967	5,507	13,109	3,401	269,136	337	18,584	2,064,625
Charlestown	6,609	414	261,673	2,622	2,112	756	18,751	151,723	:	2,504	447,164
East Boston	46,663	39,111	147,490	187	1,422	771		441,337	16,282	865	694,128
South Boston	32,795	57,691	427,407	13,457	5,599	3,081	:	366,669	13,454	40,103	960,256
Roxbury	208,776	191,764	408,668	23,511	1,022	27,994	16,124	772,403	17,645	986	1,668,893
West Roxbury	126,260	338,957	171,971	417	1,471	:	27,820	1,117,059	42,806	28,342	1,855,103
Dorchester	144,054	302,156	278,670	45,909	3,458	23,969	31,506	1,602,819	66,515	29,903	2,528,989
Brighton	109,004	260,813	105,957	4,715	1,696	17	41,453	196,681	57,070	6,415	1,083,821
Hyde Park	207	32,301	13,028	2,212	2,839	:		345,550	206,425	14,303	616,865
Totals	* 1,079,369	† 1,563,992	‡ 2,689,662	226,997	25,126	269,69	\$ 139,055	5,563,377	420,564	142,005	11,919,844
Per cent	9.06	13.12	22.57	1.90	0.21	0.58	1.17	46.67	3.53	1.19	100.00
						-					

Ter-Nore.—In the above table the city is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. ritory annexed from Brookline is included in city proper.

* Of this amount 470 square yards is Unionite, and 114 square yards is rubber.

Of this amount 771 square yards is asphalt block; 140,815 square yards is asphalt concrete; 1,119,076 square yards is bitulithic; 959 square yards is Filbertine;

22,072 square yards is Simasco, 280,084 square yards is Topeka and 215 square yards is Carey Elastite paving.

1 Of this amount 945 square yards is cobble, and 1,639,084 square yards is granite block paving on concrete base.

Of this amount 946 square yards is Blome Granitoid concrete blocked pavement, and 836 square yards is Soilamies. Of this amount 2,477,328 square yards is bituminous macadam.

33,022 square yards public alleys included in this table.

301.215 square yards public streets in charge of Park Department included in this table.
71.345 square yards public streets in charge of Commonwealth of Massachusetts included in this table. In addition to this table there are 7,031 square yards of accepted footways.

Length of Pavements.

Length in Miles and Character of Pavements on Accepted Streets, January 1, 1928.

ort.         54.04         67.57         104.07         11.51         1.22         3.89         6.70         3.89         6.70         3.89         6.70         3.89         6.70         3.89         6.70         3.89         6.70         3.89         6.70         3.89         6.70         3.80         6.70         3.80         6.70         3.80         3.10         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80         3.80	District.	Sheet Asphalt.	Asphalt Concrete.	Granite Block.	Wood Block.	Plank on Bridges.	Brick.	Concrete.	Macadam.	Gravel.	Not Graded.	Totals.
y l, 1928.       8.69       10.87       16.74       1.85       0.20       0.63       1.08         y l, 1928.       22.64       14.61       36.19       5.92       0.22       0.62       0.65       0.05         2.07       0.41       0.03       11.37       0.11       0.08       0.03       0.78       0.78         2.07       1.49       6.58       0.01       0.10       0.04       1.46       0.78         11.89       2.59       2.60       17.76       0.78       0.25       0.13         8.17       17.12       3.75       0.02       0.07       1.83         8.63       15.14       10.44       1.87       0.14       1.07       1.84         4.58       12.17       0.92       0.11       0.10       0.16       0.16       0.16         *60.98       474.03       474.03       416.0       0.16       0.16       0.16       0.19       1.98       1.98         9.74       11.83       16.36       1.16       0.16       0.16       0.16       0.16       0.16       0.16       0.16       0.16       0.19       0.19       0.19       0.19       0.19       0.19       0.19	Year 1926 report	54.04	67.57	104.07	11.51	1.22	3.89	6.70	340.24	29.91	2.57	621.72
9 1, 1928.     22.64     14.61     36.19     5.92     0.22     0.62     0.55       0.41     0.03     11.37     0.11     0.08     0.03     0.78       2.07     1.49     6.58     0.01     0.10     0.04       2.59     2.60     17.76     0.78     0.03     0.78       11.80     9.45     15.30     1.09     0.04     1.46     0.76       8.17     17.12     3.75     0.02     0.07     11.83       8.63     15.14     10.44     1.87     0.14     1.07     11.84       4.58     12.17     0.92     0.11     0.10     0.10     2.22       **60.98     † 74.05     ‡ 102.38     10.04     1.16     3.35     \$7.98       3       9.74     11.83     16.36     1.60     0.10     0.13     0.16     0.19     0.19     0.19	Per cent	8.69	10.87	16.74	1.85	0.20	0.63	1.08	54.72	4.81	0.41	100.00
22.64       14.61       36.19       5.92       0.02       0.62       0.65         0.41       0.03       11.37       0.11       0.08       0.03       0.78         2.07       1.49       6.58       0.01       0.10       0.04       0.78         2.59       2.60       17.76       0.78       0.25       0.13         11.80       9.45       15.30       1.09       0.04       1.46       0.76         8.17       17.12       3.75       0.02       0.07       1.83         8.63       15.14       10.44       1.87       0.14       1.84         4.58       12.17       0.92       0.11       0.10       2.22         1.44       0.07       0.13       0.16       0.16       0.16         **60.98       †74.05       ‡102.38       10.04       1.16       3.35       \$7.98         3         9.74       11.83       16.36       1.60       0.10       0.10       0.19       0.53       1.98         3	January 1, 1928.				~							
0.41     0.03     11.37     0.11     0.08     0.03     0.78       2.07     1.49     6.58     0.01     0.10     0.04        2.59     2.60     17.76     0.78     0.25     0.13        11.89     9.45     15.30     1.09     0.04     1.46     0.76       8.17     17.12     3.75     0.02     0.07     1.83       8.63     15.14     10.44     1.87     0.14     1.07     1.84       4.58     12.17     0.92     0.11     0.10      22.22       1.44     0.07     0.13     0.16      22.22       1.45     17.40     0.07     0.13     0.16      22.22       1.45     11.44     0.07     0.13     0.16      22.22       1.45     11.44     0.07     0.13     0.16      22.22       1.45     11.44     0.07     0.13     0.16      22.22       1.45     11.44     0.07     0.13     0.16      3.35     §7.98       3       1.54     1.60     0.10     0.10     0.10     0.10     0.10     0.10     0.10	City Proper	22.64	14.61	36.19	5.92	0.22	0.62	0.55	15.45	0.07	0.44	96.71
2.59     2.60     1.49     6.58     0.01     0.10     0.04	Charlestown	0.41	0.03	11.37	0.11	0.08	0.03	0.78	10.55		:	23.36
2.59     2.60     17.76     0.78     0.25     0.13       11.89     9.45     15.30     1.09     0.04     1.46     0.76       8.17     17.12     3.75     0.02     0.07     1.83       8.63     15.14     10.44     1.87     0.14     1.07     1.84       4.58     12.17     0.92     0.11     0.10     2.22       1.44     0.07     0.13     0.16      2.22       **60.98     †74.05     ‡102.38     10.04     1.16     3.35     \$7.98       3       9.74     11.83     16.36     1.60     0.10     0.13     0.63     1.98       3	East Boston	2.07	1.49	6.58	0.01	0.10	0.04		22.02	98.0	0.04	33.21
ury     11.89     9.45     15.30     1.09     0.04     1.46     0.76       s.17     17.12     3.75     0.02     0.07     146     0.76       s.63     15.14     10.44     1.87     0.14     1.07     1.84       s.63     12.17     0.92     0.11     0.10     2.22       r.44     0.07     0.13     0.16      2.22       s.60.98     †74.05     ‡102.38     10.04     1.16     3.35     \$7.98       s.7.98     11.83     16.36     1.60     0.19     0.15     1.98	South Boston	2.59	2.60	17.76	0.78	0.25	0.13		19.82	0.74	1.46	46.13
S. 63   15.14   10.44   1.87   0.02   0.07   1.83   1.84   1.84   1.87   0.14   1.07   1.84   1.84   1.87   0.14   1.07   1.84   1.84   1.87   0.15   1.84   1.84   1.87   0.15   1.84   1.84   1.84   1.87   0.15   1.84   1.84   1.84   1.84   1.84   1.84   1.84   1.84   1.84   1.84   1.84   1.84   1.84   1.84   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83   1.83	Roxbury	11.89	9.45	15.30	1.09	10.04	1.46	0.76	50.26	1.34	0.02	91.64
8.63       15.14       10.44       1.87       0.14       1.07       1.84         4.58       12.17       0.92       0.11       0.10       2.22         1.44       0.07       0.13       0.16          *60.98       †71.05       ‡102.38       10.04       1.16       3.35       \$7.98          3         9.74       11.83       16.36       1.60       0.10       0.15       1.98          1.98	West Roxbury	8.17	17.12	3.75	0.03	0.07	:	1.83	72.26	2.67	0.32	106.21
4.58     12.17     0.92     0.11     0.10     2.22       1.44     0.07     0.13     0.16	Dorchester	8.63	15.14	10.44	1.87	0.14	1.07	1.84	97.01	4.53	0.14	140.81
*60.98     †71.05     †102.38     10.04     1.16     3.35     \$7.98       3       *60.98     †71.05     †102.38     16.04     1.16     3.35     \$7.98       3	Brighton	4.58	12.17	0.93	0.11	0.10		2.25	28.47	3.81	0.11	52.49
*60.98     †74.05     ‡102.38     10.04     1.16     3.35     \$7.98        3       9.74     11.83     16.36     1.60     0.19     0.53     1.98	Hyde Park		1.44	0.07	0.13	0.16	:		19.78	13.48	0.24	35.30
9.74 11.83 16.36 1.60 0.10 0.53 1.98	Totals	* 60.98	† 71.05	‡ 102.38	10.04	1.16	3.35	\$ 7.98	335.62	27.50	2.80	625.86
1.20	Per cent	9.74	11.83	16.36	1.60	0.19	0.53	1.28	53.63	4.39	0.45	100.00

anotes.—In the above table the erry is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. Territory amend from Brookline is included in city proper.

* Of this amount 0.02 mile is Unionite, and 0.00 mile is rubber.

and 14.80 miles is Topeka, and 0.00 mile is Carey Elastite paving.

10 this amount 0.04 mile is cobble, and 53.69 miles is grantic block paving on concrete base.

10 this amount 0.06 mile is Blome Granticid concrete blocked pavement, and 0.04 mile is Soilamies.

11.28 miles public alleys included in this table.

12.48 miles public streets in charge of Park Department included in this table.

2.28 miles public streets in charge of Commonwealth of Massachusetts included in this table. in addition to this table there are 1.36 miles of accepted footways. The following changes were made in pavement during the year:

0.01 mile or 1,036 square yards sheet asphalt changed to bitulithic. 0.00 mile or 151 square yards sheet asphalt changed to granite block. 0.00 mile or 37 square yards asphalt concrete changed to bitulithic. 0.03 mile or 699 square yards bitulithic changed to sheet asphalt. 0.00 mile or 6 square yards bitulithic changed to granite block. 0.01 mile or 104 square yards bitulithic changed to concrete. 0.01 mile or 100 square yards Topeka changed to sheet asphalt.
0.00 mile or 51 square yards Topeka changed to bitulithic. 0.80 mile of 28,953 square yards granite block changed to sheet asphalt. 0.26 mile or 12,443 square yards granite block changed to bitulithic. 0.72 mile or 17,659 square yards granite block changed to concrete. 0.03 mile or 578 square yards wood block changed to sheet asphalt. 1.46 miles or 42,321 square yards wood block changed to bitulithic. 0.02 mile or 358 square yards wood block changed to granite block. 0.01 mile or 278 square yards plank on bridges changed to granite block. 0.06 mile or 1,834 square yards plank on bridges changed to wood block. 0.53 mile or 10,891 square yards brick changed to sheet asphalt. 2.47 miles or 40,270 square yards macadam changed to sheet asphalt. 0.22 mile or 3,321 square yards macadam changed to asphalt concrete. 2.87 miles or 57,049 square yards macadam changed to bitulithic. 0.30 mile or 8,240 square yards macadam changed to granite block. 0.01 mile or 127 square yards macadam changed to plank on bridges. 0.05 mile or 798 square yards macadam changed to concrete. 2.49 miles or 40,164 square yards gravel changed to sheet asphalt. 0.00 mile or 42 square yards gravel changed to asphalt concrete. 1.53 miles or 24,111 square yards gravel, changed to bitulithic. 0.49 mile or 7,987 square yards gravel changed to concrete. 0.06 mile or 1,994 square yards gravel changed to macadam. 0.04 mile or 2,198 square yards not graded changed to sheet asphalt. 0.00 mile or 5,622 square yards not graded changed to granite block. 0.01 mile or 300 square yards not graded changed to concrete. 0.00 mile or 1,736 square yards not graded changed to macadam.

#### EMPLOYEES.

The following tables show the number of requisitions made on the Civil Service Commission for men; the number appointed, reinstated, died, resigned, transferred and retired; also the grade and number of employees in the department:

Requisitions made on the		vil S	Servic	e Co	mmi	ssior	ı.	35
Number of men called								45
Number of men certified								98
Number of men appointe	$^{\mathrm{ed}}$							27
Provisional appointments	s ma	de ·	perma	anen	t.			1
Promotions allowed .								25
Reinstatements allowed								* 14
Number of men resigned								18
Number of men died.			·					40

Number retired under the Veterans' Retirement Act	1
Number retired under the Boston Retirement Act	81
Number of transfers to other departments	14
Number of transfers from other departments .	28
Number of men discharged	5

The records of the department show that there are now 3,052 persons eligible for employment in the several divisions and of that number 2,978 were upon the January, 1928, pay rolls.

#### Grade and Number of Employees.

	<u> </u>										
	Services.										
Title.		Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lighting.	Water.	Total.	
Commissioner	1									1	
Division engineers		1	1	1			1		1	5	
Engineers in charge		1							1	2	
Chief clerk	1									1	
Clerks	38	21	8	2	2	* 1	2	1	42	117	
Assistant engineers (civil)		15	25	1			10		5	56	
Draughtsmen		2	12				5		3	22	
Instrumentmen		14	24				4		7	49	
Rodmen	<b> </b>	2	1				1			4	
Inspectors	1	35	44	53	29		3	1	31	197	
Foremen		12	5	10	9		1		12	49	
Subforemen		20					3			23	
Address printers									3	3	
Blacksmiths and assistants		8	3	20					5	36	
Blueprinters	2									2	
Chauffeurs-teamsters	1	17	7	56	24		4		14	123	
Carpenters and assistants		19	3	5		4	14		6	51	
Chief inspectors		1			1				1	3	
Cement testers and assistants	3									3	
Chemists and assistants		2								2	
Coal passers			3							3	
Cashiers						1				1	
Drawtenders and assistants							129			129	
Carried forward	47	170	136	148	65	6	177	2	131	882	

#### Grade and Number of Employees.—Continued.

					SER	Vices				
Title.	Central Office.	Paving.	er.	Sanitary.	reet Cleaning.	y.	lge.	Lighting.	er.	al.
	Cen	Pav	Sewer.	San	Street Clea	Ferry.	Bridge,	Lig	Water.	Total.
Brought forward	47	170	136	148	65	6	177	2	131	882
Deckhands						25				25
Engineers (steam)		11	6			12			1	30
Electricians			2			1	1			4
Feeders		1		6						7
Firemen		5	15			30			1	51
Gatemen			4			16				20
General foremen		2	. 1		1	1			2	7
Harnessmakers and assistants				9						9
Head chauffeurs		4								4
Horseshoers				7						7
Janitors						1				1
Matrons						7			<i>.</i>	7
Joiners						2				2
Laborers		312	85		110	12	6		170	695
Lamplighter			,			1				. 1
Machinist and assistants			6			9	1		20	36
Meter testers									8	8
Meter readers									32	32
Masons (stone and brick)			10						2	12
Medical inspectors		1		1	1					3
Oilers			14			16				30
Pipe fitters and repairers						2			16	18
Pavers		74	1			-			3	78
Plumbers									20	20
Painters		3	1	10		3	3			20
Captains			,			12				12
Quartermasters						12				12
Repairers		23	1			12			94	118
Roofer		20	1			1			0-1	110
Rammers		9								9
Rigger			1			1				2
Sealers									3	3
beaters										
Carried forward	47	615	283	181	177	170	188	2	503	2,166

#### Grade and Number of Employees.—Concluded.

	Services.									
Title.	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lighting.	Water.	Total.
Brought forward	47	615	283	181	177	170	188	2	503	2,166
Sewer flushers			22							22
Supervisors and deputy		1		_v 1	1		1			4
Stenographers		1	1							2
Stonecutters		7	2		]					9
Superintendents and deputy		2	1						2	5
Stockkeepers				1		1			1	3
Stableman		12	3	24	19	'	1		1	60
Tankman						1				1
Teamsters and helpers		78	1	378	227				6	690
Telephone operators				1					1	2
Tollmen						13				13
Chief veterinarian		1								1
Watchman		2	10	12	4		2		6	36
Weighers		1		1						. 2
Wharfingers				2						2
Wharfmen				2						2
Wheelwrights and assistants				4					ļ.	4
Yardmen		5	2	12	2				7	28
Totals	47	725	325	619	430	185	192	2	527	3,052

#### Number of Employees Actually Employed January 1, 1927, and January 1, 1928.

				, -,						
	Central Office.	Bridge.	Ferry.	Lighting.	Paving.	Sanitary.	Sewer.	Street Cleaning, and Watering.	Water.	Total.
January 1, 1927	39	196	176	3	711	641	328	433	536	3,063
January 1, 1928	38	191	183	2	710	596	318	413	527	2,978
		Tota	ıl Elig	ible F	orce.					
January 1, 1927	46	198	185	3	737	661	336	446	539	3,151
Innuary 1 1000	477	100	105		705	610	20.5	420	507	2000

appointments, Transfers, Resignations, Retirements, Deaths, etc., of Employees.

-	Po	111111						Jara	——————————————————————————————————————	шень,			pro	
Died.		Retired. Act of 1922.	Retired Veterans, Act of 1911.	Transferred to Other Departments.	Transferred to Other Services.	Discharged.	Resigned.	January 1, 1927.	Services. 1927–1928.	January 1, 1928.	Transferred from Other Services.	Transferred from Other Depart- ments.	Reinstated.	Appointed.
		1		1	3			46	Central Office	* 47	3		1	2
	2	6		1	2	1		198	Bridge	192	2	2		2
		3		1	7			185	Ferry	185		2	1	8
	1							3	Lighting	2				
	9	27		1	13	1	11	737	Paving	725	36	7	2	5
	9	10		2	32	2	4	661	Sanitary	619	7	5	1	4
	8	15		3	5		1	446	Street Cleaning	430	8	8		
	4	7		2	10		2	336	Sewer	325	10	1		3
	7	12	1	3	7	1		539	Water	527	13	3		3
4	10	81	1	14	79	5	18	3,151	Totals	3,052	79	28	5	27

^{*}Includes eight Central Office employees who are paid on Water Service pay roll.



### PART II. APPENDICES.

#### APPENDIX A.

	CEN	TRAL	Oppi	CE				
Appropriation	OEN.						\$88,097	55
		Ċ					116	
				-	•	•		
							\$88,214	06
Expenditures from Ja								
31, 1927		•	•				88,214	06
	777	7						
Salama Camanianian an		cpend:					<b>@0.000</b>	00
Salary, Commissioner Salaries of clerks, ster		nh ana	ot o	•	•	•	\$9,000	
Automobile expenses:		mers,	etc.	•	•	•	70,610	92
Wages of chauffeur				<b>©</b> 1	,699	67		
Franklin sedan .	•	i.	•		,600			
Repairs, etc	-	•	•	_	46			
Gasolene and oils .	•	•	•		243			
Tires and tubes .			•		73			
Supplies			Ċ		147			
Registration						00		
8				-			4,824	94
Printing							1,790	27
Stationery							786	54
Postage							475	39
Telephone tolls Burroughs adding ma							37	
Burroughs adding ma	chine						98	
Directories							52	
Photographs							192	
Books, papers and offi	ice su	pplies	•				266	
Premium on bonds .		•			٠	•		00
Expenses of expert .	٠	•	٠	•	•		75	υÜ
							\$88,214	06

#### APPENDIX B.

#### REPORT OF THE DIVISION ENGINEER OF THE BRIDGE AND FERRY DIVISION.

Boston, January 1, 1928.

Mr. James H. Sullivan, Commissioner of Public Works.

Dear Sir,— I respectfully submit the following report of the income, expenditures and operation of the Bridge and Ferry Division for the year ending December 31, 1927. The expenditures of the division in the regular maintenance appropriations of the department were \$1,021,741.76. Under a number of special appropriations \$390,752.61 were expended, making the total expenditures for the year \$1,412,494.37.

The more important works undertaken during the past year in the Bridge Service were the rebuilding of the West Newton Street Bridge over the New York, New Haven & Hartford Railroad, and the reconstruction of the spans of Broadway Bridge over the main lines of the New York, New Haven & Hartford Railroad.

In the Ferry Service a new electrically operated ferry bridge with its foundations was constructed at the North Ferry, East Boston.

As noted in the reports for some years past, Congress Street Bridge is in very bad condition and should be rebuilt at once. Chapter 157 of the Acts 1926 authorized the borrowing \$800,000 outside the debt limit for this work and the act has been accepted by the city.

The pile approaches to the draw span of Chelsea Bridge over the North channel of the Mystic river are steadily deteriorating and should be rebuilt preferably with steel superstructure on masonry piers. The work would cost approximately \$1,500,000.

An appropriation has been made for reconstruction of Columbus Avenue Bridge over the Boston & Albany Railroad, and the rebuilding should be completed in

the summer of 1928.

In connection with the widening of Morton, Ashland and River streets, the bridges on these streets should be rebuilt.

In the Ferry Service two new boats should be provided in place of the old wooden vessels which are unfit for the heavy motor traffic. The two old wooden ferry bridges should also be replaced by modern electrically operated steel bridges.

#### Broadway Bridge, over New York, New Haven & Hartford Railroad.

The Boston Bridge Works of Boston was awarded a contract approved February 14, for the rebuilding of

span 11 and 12 of this bridge.

These spans are over the main line tracks of the railroad and the steel was in badly corroded condition from the locomotive fumes. Traffic conditions are much improved by rebuilding as in the new design there was eliminated a through girder which in the old structure was in the middle of the roadway so that now the roadway is clear from curb to curb. The entire superstructure of these spans was rebuilt as well as the column bent at Pier 11. The new spans are of steel encased in concrete with concrete slab deck. The roadway is paved with granite block. The sidewalks are concrete; cast-iron plates are provided over the railroad tracks to protect the structure from the blast action of the locomotives.

The old masonry piers were utilized as foundations for the new spans. Foot travel was maintained during construction by a temporary bridge built of wood and steel. A clearance of 16.12 feet was provided above the railroad tracks. This work was completed October 10, 1927. The contract price for its construction was

\$68,584.20.

#### Charlestown Bridge, over Charles River.

On June 10 a contract was approved with Maurice M. Devine for pointing the masonry piers of this bridge. The joints were carefully cleaned by hand tools and the pointing was done with a cement gun which forced the cement mortar completely into the cavities in the joints in a much more satisfactory manner than could be done by hand pointing. The joints were finished by hand tools to make a more satisfactory appearance.

In connection with this work the steelwork of the first plate girder span from the Boston side of the bridge on the westerly side was covered with a protective coating of gunite. This work was completed September 24. The contract price was \$9.000.83.

#### Chelsea Bridge North.

April 4, 1927, a contract was approved with the Rendle Corporation for repairing the easterly end of the middle draw fender pier of Chelsea Bridge North which had been badly damaged by a steamer. New piling was driven and the timber work renewed where necessary. The work was completed June 14, 1927, at a cost to the city of \$4,765.44.

February 23 a contract was approved with the Boston Bridge Works for repairing the running mechanism of the draw span. This work consisted of adjusting the straps, rods and other machinery at the center bearing. The work was completed April 20 at a cost of \$1,932.79.

June 24 a contract was approved with Maurice M. Devine for furnishing and laying wood paving with asphalt joints on roadway of the draw span. The wooden flooring under the paving was repaired, waterproofing placed on this plank and then the wood block paving laid. The date of completion was August 20. The contract price for this work was \$9,708.65.

August 9 a contract was approved with the Rendle Corporation for repairing the westerly end of the northerly fender pier which had been badly damaged by the steamer "Coulee" of the Fall River Navigation Com-The entire west end of the pier was rebuilt for a distance of about 175 feet at a contract price of \$10,984.01. Work was completed October 6.

#### Chelsea Bridge South.

A contract with the Boston Bridge Works, Inc., for repairing counterweight links and adjusting the shear locks at Chelsea Bridge over the South channel of the Mystic river was approved March 11, 1927. The contract cost was \$1,939.

Dorchester Avenue Bridge, over Fort Point Channel.

November 3, 1927, a contract was approved with Maurice M. Devine for repairing the sidewalk on the northeasterly pile approach. The old asphalt sidewalk was removed and replaced with reinforced concrete. The planking, stringers and other timberwork supporting the sidewalk was replaced with new lumber where necessary. This work is still in progress and will be completed at an early date.

Meridian Street Bridge, over Chelsea Creek.

September 13, 1927, a contract was approved with the Rendle Corporation for rebuilding the sidewalks of pile structure. The asphalt sidewalks which were nearly worn out were removed and replaced with reinforced concrete slabs with expansion joints every 30 feet. The wooden flooring carrying this slab was renewed where necessary. The piling supporting the sidewalks was also repaired. The amount paid the contractors for this work was \$9,136.08. Work was completed November 22, 1927.

#### Northern Avenue Bridge.

The entire steel superstructure of this bridge was cleaned and painted under a contract approved July 1 with Maurice M. Devine. After cleaning with scaling tools and wire brushes, a patch coat of red lead and linseed oil was applied followed by two coats of blue lead and linseed oil. The contract price for the work was \$7,300; the date of completion was September 30.

August 14 a contract was approved with W. H. Ellis & Son Company for repairing the wooden fenders with new piling and timber work. The work was completed September 20; the contract price was \$4,842.12.

December 15 a contract was approved with the Boston Bridge Works for furnishing labor and materials for the repairing of the turning mechanism of the draw span at an estimated cost of \$3,000. This work is still in progress. It involves adjusting the wheels and spider rods, placing a new band on the outside of the wheels, new sleeves in the wheels, rebolting some track sections and some other minor repairs. Some leaks developed in the draw pit masonry and all the stone masonry facing was pointed. This greatly reduced the flow of water but there is no assurance that the leaking condition will not arise again as this draw foundation has been settling. The cost of pointing was \$7,300.

Summer Street Bridge, over Reserved Channel.

A contract with the Rendle Corporation was approved May 25 for replacing old piling, repairing bracing, waling and other timber work of the waterway of this bridge. This work was completed July 2. The contract price was \$3,906.20.

#### West Newton Street Bridge, over New York, New Haven & Hartford Railroad.

A new steel bridge superstructure has been built on the old abutments, replacing the old superstructure which was in bad condition due to corrosion of the iron-The new bridge is of the deck plate girder type, has one roadway and two sidewalks. The roadway is of reinforced concrete slab construction paved with 3½-inch granite block and the sidewalks are granolithic. The sidewalk slabs are removable to enable repairs to be easily made to the pipes underneath. All steel below the floor surface is covered with concrete and protected from blast by cast-iron plates. A clearance of about 16 feet was provided over the railroad tracks. bridge was built by the A. G. Tomasello & Son Company, under a contract approved January 21, 1927. The work was completed June 29, 1927, at a contract cost of \$34,851.06.

Important repair jobs were done by the day labor force of the Bridge Service as follows: Blue Hill Avenue Bridge. On both roadways new stringers were placed by the railroad and on these was laid new creosoted tongued and grooved planking on which was placed a surface of wood block paving with asphalt joints

instead of the wooden sheathing formerly used.

Fairmount Avenue Bridge, over the New York, New Haven & Hartford Railroad.— A completely new wooden floor was built for the roadway; new stringers were placed by the railroad, new creosoted tongued and grooved planking spiked to the stringers by the city force and on this was laid wood block paving with asphalt joints, taking the place of the wooden sheathing.

Summer Street Bridge, over Fort Point Channel.— The wooden flooring of the roadway of both leaves of the draw span, including stringers under plank and top

plank, was renewed.

West Fourth Street Bridge, over the New York, New Haven & Hartford Railroad.— The wooden flooring of

the two roadways was completely renewed, the railroad placing new wooden stringers and the city force constructing the under plank and wearing surface.

#### Granite Avenue Bridge.

The care and control of this bridge is vested in a commission consisting of the Mayor of the City of Boston and the chairman of the Board of Selectmen of the town of Milton.

One half the expense of maintenance is paid by the County of Suffolk and one half by the town of Milton. Chapter 58 of the Acts of 1915 provides for this.

The wooden flooring of the bridge should be completely renewed. The steel should be completely

repainted.

The Milton approach of this bridge keeps crowding forward to the draw crack and it is going to be a question of time when something radical will have to be done to keep the draw span free in hot weather so that it can be operated.

#### Marginal Street Sidewalk, East Boston.

June 21 a contract was approved with Edward J. McHugh of East Boston for placing filling, slope paving and building a wire fence in place of an old collapsed bulkhead about 250 feet long, on Marginal street, near Jeffries Point. This work was under the supervision of this division for the Highway Division and was completed July 22. The contract price for the work was \$3,581.07.

#### Albany Street Wharf.

September 9 a contract was approved with Walsh & Co. for general repairs to this station. New timber was placed on the ramps and platform, the lower platform was replaced by filling surface with granite block paving, two short concrete retaining walls built and other miscellaneous work done. The contract price was \$11,855.30. The work was completed October 18 and was done under the supervision of this division for the Sanitary Division of the Public Works Department.

#### Deer Island Steamboat Wharf.

August 1 a contract was approved with the Rendle Corporation for repairing this wharf. The work consisted of renewing decayed piling and timber work,

moving the landing drop and machinery and constructing new pile spring fenders. The contract was completed December 1. The contract price for the work was \$7,168.68. This work was done under the supervision of this division for the Penal Institutions Department.

#### Fireboat Wharf at Northern Avenue.

A contract was approved with the Franklin Engineering Company May 26 for repairing the wharf and slip for the fireboat Engine 44 of the Fire Department. Some old piles and timber work were renewed. The payment to the contractor was \$2,041. The work was done under the supervision of this division for the Fire Department and was completed June 23.

#### Fort Hill Wharf.

July 8 a contract was approved with Walsh & Co. for repairing this station. Foundation piling was strengthened, new ramps built, new windows installed and other miscellaneous repairs made. The contractors were paid \$11,699.85 for the work which was completed December 27. This work was done under the supervision of this division for the Sanitary Division of the Public Works Department.

#### FERRY SERVICE.

The following steam ferryboats are in commission:

Name.	When Built.	Type.	Length.	Gross Tonnage.
Noddle Island (rebuilt)	1921	Propeller	174 ft. 5 in.	564
General Sumner	1900	- "	164 " 3 "	450
John H. Sullivan	1912	"	172 " 3 "	527
Lieutenant Flaherty	1921	"	174 "	727
Ralph J. Palumbo	1921	u	174 "	755
Charles C. Donoghue	1926	u	174 " 4 in.	756.77
Daniel A. MacCormack	1926	"	174 " 4 "	756.77

Two of these boats, the "Noddle Island" and the "General Sumner," should be replaced by new steel boats as they are not suitable to handle the existing traffic.

A contract with the Richard T. Green Company for repairing the ferryboats "Charles C. Donoghue" and "Daniel A. MacCormack" was approved September 20, 1927. The amount paid under the contract was \$9,532.20. The hulls of the boats were cleaned and painted, some rivets repaired, some welding done on the propellers and some minor repairs made.

On February 24 two of the ferryboats were sold at auction, the "Hugh O'Brien" and the "Governor Russell." The "Hugh O'Brien" was sold for \$1,600 and the "Governor Russell" was sold for \$15,000.

#### "LIEUTENANT FLAHERTY." JANUARY 27, 1927.

A contract with the Richard T. Green Company for repairs to the hull and equipment of the "Lieutenant Flaherty" was approved January 27, 1927. Rivets were repaired or replaced as necessary, the hull cleaned and painted, main engines and auxiliaries adjusted and a new turbine generator installed. The work was completed March 10, 1927, at a contract cost of \$5,367.80.

#### "Noddle Island."

A contract with the Atlantic Works for repairing the hull, etc., of the ferryboat "Noddle Island" was approved January 7, 1927, as the ends of the boat were

sagging, the concrete ballast was removed, repairs made to the hull, new telegraph connections installed, the hull cleaned and painted, the main shaft lined up and some other repairs made to the engines and hull. The contract cost was \$9,968.59 and was completed March 9, 1927.

A contract with Richard T. Green Company for repairs to the "Ralph J. Palumbo" was approved April 8, 1927. Rivets and seams were repaired, the hull cleaned and painted, the ends repaired, a new turbine generator installed, some machine repairs made, and one rudder repaired. The amount paid under the contract was \$8,200.40.

A contract with the Bethlehem Shipbuilding Corporation, Ltd., for furnishing and installing new boilers in the ferryboat "John H. Sullivan," was approved June 16, 1927. The amount paid on the contract was \$28,895. The work consisted in removing the existing boilers, building and installing two single end Scotch marine boilers complete with steam drum, furnishing and installing a new air pump, and furnishing and installing two new steam steering engines. The new boilers complied with the requirements of the American Bureau of Shipping.

A contract with the Bethlehem Shipbuilding Corporation, Ltd., for repairing the ferryboat "General Sumner" was approved June 22, 1927. The amount paid under the contract was \$9,190. The work consisted chiefly in cleaning and painting the hull and superstructure, furnishing and installing a new tail shaft, making some repairs to frames and planking of hull, and overhauling

some of the machinery.

A contract with the Atlantic Works for repairing bronze propeller blades was approved May 6, 1927.

Six blades were recast. Cost, \$930.

Another contract was approved with the Atlantic Works on November 15, 1927, and six more blades were recast. Cost, \$906.

A contract with W. H. Ellis & Son Company for repairing piers at the North and South Ferries was approved October 11, 1927.

The amount paid on the contract was \$22,620.

The outer half of the middle pier, North Ferry, Boston, was rebuilt, and repairs made to all the other piers with the exception of the North Pier, North Ferry, East Boston. New piles were driven where needed

in place of old ones, new oak girders placed as necessary

and miscellaneous repairs made.

A contract with J. Edward Ogden Company was approved March 18, 1927, for building an electrically operated ferry bridge with accompanying mechanism at the North Ferry, East Boston. This bridge is of the same type as described in the annual report of 1924. The amount of the contract was \$140,500.

A contract with W. H. Ellis & Son Company was approved March 22, 1927, for building foundations for the new ferry bridge. Two concrete piers supported on piles were built to carry the towers at the outer end of the bridge and a spread footing of reinforced concrete constructed to carry the inner end. The amount paid under the contract for the foundations was \$26,789.

At the headhouse, North Ferry, Boston side, a new gas boiler was installed for heating purposes. The heating equipment was entirely renewed. A new ceiling was erected to cut down the amount of radiation required and the building is being heated far better than formerly and with much less cost.

Yours respectfully,

John E. Carty, Division Engineer.

#### BRIDGE SERVICE.

#### FINANCIAL STATEMENT, 1927.

Expenditures from Maintenance Appropriation.

Boston	bridges				\$452,916	60
Boston	and Can	abridge	hride	rec	16 496	35

\$469,412 95

#### Total Expenditures.

From maintenance appropria	tion.	\$469,412 95
From special appropriations		233 637 77

\$703,050 72

#### EXPENDITURES ON BOSTON BRIDGES.

#### (1.) Administration: Salaries:

alarics.	
Division engineer	\$3,750 00
Supervisor	3,258 33
Engineers and draughts-	
men	31,256 29
Clerk	2,100 00
Inspectors	4,192 30
Medical inspector	200 00
Foreman	2,258 05
Veterans' pensions	4,260 76
Holiday	6,757 07
Vacations	1,95584
Injured employees	214 28
Printing, postage and sta-	
tionery	1,052 16
Travelling expense	273 78
Telephone and telegrams .	$43 \ 15$
Engineers supplies and in-	
struments	174 04
Repairing instruments .	$100 \ 15$
Typewriter inspection	$32 \ 00$
Office supplies	$140 \ 36$
Blueprint room	216 63

\$62,235 19

#### (2.) Yard and Stockroom:

Yard:

Clerk, janitor an	$^{\mathrm{d}}$	watch	1 <b>-</b>		
men				\$3,190	
Travelling expense	e			242	90
Tools, new .				966	88
Tools, repaired				552	62
Telephone .				235	63
Repairing building	gs			552	81
New tool houses	•			680	47
Supplies				299	83
				@ a = a a	

\$6,722 11

Stockroom:

Stock purchased . \$11,019 17 Stock used . . \$13,368 60

\$4,372 68

#### Automobiles, Trucks and Compressor.

	Truck, B-1.		Truck, B-2.		Auto, B-3.*		Auto, B-4.*	Auto, B-5.		Compressor, B-6.	Total	
Cost, new			\$3,225	00	\$1,330	00		\$1,300	00		\$5,855	00
Chauffeurs' wages		.					\$1,642 01	1,244	41		2,886	42
Storage		.						20	00	· · · · · · · · · · · · · · · · · · ·	20	00
Repairs	\$511	30	47	66	234	13	387 36	186	21	\$3 00	1,369	66
Supplies	24 2	20	54	25	55	88	3 87	41	87		180	07
Tires and tubes (new and repaired)	407 (	08	149	77	65	40	67 01	162	02		851	28
Gasolene and oil	248 3	50	262	08	222	72	211 23	353	63	80 95	1,379	11
Registration	2 (	00	4	00	10	00	10 00	17	00	4 00	47	00
Equipment			286	50						282 68	569	18
Totals	\$1,193	08	\$4,029	26	\$1,918	13	\$2,321 48	\$3,325	14	\$370 63	\$13,157	22

^{*} Auto B-3 was used by foreman and B-4 by supervisor until December 27, 1927, when B-4 was transferred to foreman and a new auto purchased for supervisor and numbered B-3.

Tide Water Bridges.

Bridges.	Drawtenders' Salaries.	Mechanics' Wages.	Material.	Repair Bills.	Supplies.	Total.
Broadway	\$16,363 66	\$463 35	\$81 81	\$1,224 14	\$272 04	\$18,405 00
Charlestown	22,455 19	1,676 43	1,983 92	2,000 86	494 65	28,611 05
Chelsea North	18,728 93	3,257 01	1,313 07	3,851 34	1,496 07	28,646 42
Chelsea South	18,769 59	390 30		966 81	1,170 12	21,296 82
Chelsea Street	16,381 04	1,467 14	581 75	1,005 09	349 78	19,784 80
Congress Street	16,779 63	803 45	568 41	1,815 10	1,184 24	21,150 83
Dorchester Avenue	16,340 66	1,333 30	473 99	857 07	372 32	19,377 34
Dover Street	16,376 74	2,339 90	1,028 81	1,652 16	292 10	21,689 71
L Street*	16,382 94	1,345 71	365 51	520 87	293 64	18,908 07
Malden	16,760 71	1,809 13	878 96	1,250 04	809 85	21,508 69
Meridian Street	16,689 46	1,024 40	379 25	1,222 48	398 95	19,714 54
Northern Avenue	18,935 89	4,375 01	7,076 72	6,877 08	5,044 76	42,309 46
Summer Street	16,846 70	3,520 26	6,413 29	1,190 95	358 84	28,330 04
Warren	17,139 32	3,998 02	1,188 81	1,497 47	882 00	24,705 62
Totals	\$244,950 46	\$27,803 41	\$22,334 30	\$25,931 46	<b>\$</b> 13,419 36	<b>\$</b> 334,438 39

^{*} Now Summer Street over Reserved Channel.

#### Repairs on Inland Bridges.

Bridges.	Labor and Materia	
Albany Street	\$397	14
Allston Street	196	82
A Street Stairs	123	68
Austin Street — Prison Point	22	34
Arlington Street	981	38
Babson Street	53	33
Beacon Street, over Boston & Albany Railroad	38	99
Bennington Street	31	45
Berkeley Street	89	44
Blue Hill Avenue	5,504	49
Boston Street, over railroad	116	28
Boylston Street, over Boston & Albany Railroad	933	91
B Street Stairs	174	13
Brooks Street Stairs.	675	00
Carried forward	\$9,338	38

#### Repairs on Inland Bridges.--Continued.

Bridges.	Labor and Material.
Brought forward	\$9,338 38
Byron Street.	3 72
C Street Stairs	39 55
Cambridge Bridge	1 20
Cambridge Street, Allston	17 94
Central Avenue	139 65
Chelsea Street, over viaduct	190 00
Columbus Avenue	211 68
Dana Avenue	427 83
Dartmouth Street	300 00
Dorchester Avenue, over railroad	118 53
Everett Street	28 14
Fairmount Avenue	6,857 25
Ferdinand Street	428 62
Gove Street (Foot)	439 26
Harvard Street	3 00
Huntington Avenue	65 14
Hyde Park Avenue.	1 48
Jones Avenue (Foot)	51 00
Massachusetts Avenue, over New York, New Haven & Hartford Railroad	197 77
Massachusetts Avenue, over Boston & Albany Railroad	129 34
Metropolitan Avenue	70 67
Milton Street	270 88
Milton Lower Mills	60 00
Morton Street	73 90
Neptune Road.	98 66
New Allen Street.	194 20
Oakland Street.	65 62
Public Landing (Northern Avenue)	390 00
Peabody Square	19 00
Redfield Street.	104 04
Reservoir Road.	77 07
Sprague Street	54 48
Shawmut Avenue	37 86 720 34
louthampton Street	
Southampton Street	166 41

#### Repairs on Inland Bridges .-- Concluded.

Bridges.										
Brought forward	\$21,392 61									
Summer Street, over B Street	759 06									
Summer Street, over C Street	2 10									
Stuart Street	24 00									
Toll Gate Way (Foot)	232 55									
Wadsworth Street	229 26									
West Fourth Street	7,451 61									
West Rutland Square (Foot)	19 00									
Winthrop	37 20									
Cleaning Bridges	3,480 00									
Snow	5,085 23									
Total	\$38,712 62									
Summary of Expenditures.	\$62,235 19									
Yard and stockroom	4,372 68									
Automobiles, trucks and compressor	13,157 72									
Гide water bridges	334,438 39 38,712 69									
	\$452,916 60									

#### SPECIAL APPROPRIATIONS.

#### BRIDGES, REPAIRS, ETC.

Material				\$7,388 96
Brooks	STREET	STAIRS.		
Repair bills			\$468 95	
Transit Department pay roll .			1,509 60	
				1,978 55
Charle	STOWN	BRIDGE.		
Steves Lacios Company			\$1,621 81	
Paint			105 93	
The Boston Bridge Works, Inc			1,442 98	
Maurice M. Devine			9,000 83	
Advertising			7 50	
Traveling expense	•		4 00	
Transit Department pay roll .	•		340 80	12,523 85
				12,020 00
Carried forward				\$21.891 36

Brought forward  .					\$21,891 36					
CHARLESTOWN BRIDGE S. J. Tomasello	Storeh	ouse, l	Paving.	Approaches	To.					
S. J. Tomasello		•			384 02					
CHELSEA BRIDGE NORTH.										
The Boston Bridge Works	, Inc			\$1,932 79						
The Rendle Corporation		:		16,531 52						
Repair bills				700 72						
Photographs	: :			30 00						
Traveling expense .		٠		22 56 584 95						
The Boston Bridge Works Maurice M. Devine The Rendle Corporation Repair bills Advertising Photographs Traveling expense Engineering		·			29,534 44					
			E Souti							
The Boston Bridge Works					1,939 12					
G		C	- D							
Cor. R. H. Baker & Co., Inc. C. & R. Construction Con	NGRESS	STREE.	T DRIDE	зы. \$89-55						
C. & R. Construction Con	npany			790 36	070.01					
CHELSEA STREET										
Buck-MacDonald Compan	ıy .	•			329 71					
Dorc	HESTER	AVEN	UE BRI	DGE.						
W. H. Ellis & Son Compar Maurice M. Devine . Advertising	ıy .			\$1,625 87						
Advertising			: :	8 00						
					4,030 25					
Do Repair bills	OVER S	TREET	BRIDGE	•						
Repair bills	 	•		\$196 49 97 20						
Transit Department pay 10		•	•		293 69					
Evi	ERETT S	STREET	Bridgi	E.						
V. James Grande Advertising				\$8,150 00						
Advertising		•		8 80	8,158 80					
3.6		~	-		•					
The Rendle Corporation Advertising Traveling expense .				\$8,679 28						
Advertising				8 00						
		•			8,692 38					
Norr	HERN .	Avenu:	E Bride	E.						
Maurice M. Devine .				\$7,300 00						
W. H. Ellis & Son Compan Advertising	y .			$\frac{4,842}{15}$ $\frac{12}{50}$						
Repair bills				17 36						
Transit Department pay ro	ii :			62 00						
Maurice M. Devine W. H. Ellis & Son Compan Advertising Repair bills New pump Transit Department pay ro Engineering				467 96	13,277 94					
Carried forward .		•			\$89,411 62					

Brought forward		\$89,411 62
SUMMER STREET BRIDGE, OVER FORT	POINT CHAN	
C. & R. Construction Company W. H. Ellis & Son Company Advertising Transit Department pay roll	\$507 38	
W. H. Ellis & Son Company	124 77	
Advertising	298 70	
Transit Department pay ron		938 60
	α .	
SUMMER STREET BRIDGE, OVER RESE		NEL.
The Rendle Corporation	\$3,906 22	
Advertising	5 40 1 00	
Advertising		3,912 42
Warren Bridge.		
The Rendle Corporation	\$7,176 30	
Motors and control	\$7,176 30 2,646 83 943 00	
Installing motors	943 00	
Power connection with Boston Elevated Rail-	103 53	
Guard rail around motors	87 00	
New heater	850 00	
		11,806 66
West Fourth Street Bri	IDGE.	
Lumber	\$8.257 65	
Lumber	31 77	
Traveling expense	3 60	
Tools	48 00	8,341 02
		0,041 02
A STREET STAIRS.		
Transit Department pay roll		340 80
Albany Street Bridge		
		81 60
Transit Department pay 10ii		01 00
Arlington Street Brid	GE.	
Repair bills		1,480 63
P. G G		
B STREET STAIRS.		240.00
Transit Department pay roll		340 80
Berkeley Street Bride	GE.	
Repair bills		147 75
Broadway Bridge.		0.000 10
Repairs		370 13
CHELSEA STREET BRIDG	E.	•
Advertising		9 90
Columbus Avenue Bride		
Repair bills	\$20 79	
Flagman	42 11 33 00	
Photographs	32 80	
Tanada sopration pul son		128 70
<i>a</i> . 16		P117 210 C2
Carried forward		\$117,310 63

Brought forwa	urd										\$117,310	63
	F	TUNT	TNG	ron .	Ave	NUE	Ввя					
Transit Departme											48	80
Transit Departme	,110 p	~j -		•	•	•	•	•	·	•		
											\$117,359	43
	$B_{\mathbf{R}}$	OAD	WAY	Bri	DGE.	Sou	тн	Bos	TON.			
The Boston Bridg											\$68,584	20
Inspection of stee	1										118	72
Advertising .												75
Traveling expense	;										124	
Waterial	d pla	ctio	on a	or ro	ile	•	•	•	•	•	$\frac{21}{186}$	58
Advertising . Traveling expense Material . Waterproofing and Removing and ins	a pia	ລວເປ ລອງປະ	ar se	ar ra rvice	110	•	•	•	•	•	186	75
Engineers' supplie	es				:		·	Ċ	Ċ		31	05
Engineers' supplie Engineering .											2,708	74
											\$71,985	27
		$T_{R}$	EMO	NT S	TREE	ет Ві	RIDO	E.				
Adjusting paveme	$_{ m nt}$										\$643	
Foundation pier											460	
Crillege beams		٠	٠	•	٠		٠	•		•	407 110	79
New lights	•	•	•	:	:	٠	•	•	•		314	
Installing lights	:						:	:	:		794	06
Painting lights											22	00
Traveling expense	;										2	80
Foundation pier Rail guards . Grillage beams New lights . Installing lights Painting lights Traveling expense Engineering .											416	20
											\$3,172	26
											Ç0,112	
	W	EST	Nev	VTON	ST	REET	Br	inci	ā.			
A. G. Tomasello &	Gor	. In	0				2010	ID GI			\$34,851	06
A. G. Tolhasello & Inspection of steel Advertising . Setting plates Traveling expense Engineers' supplie Engineering .	l			:	:	:	:	·	:			49
Advertising .											23	75
Setting plates												28
Traveling expense												90
Engineers supplie	S	•	•	•	•	•	٠	٠	•	٠	$\frac{31}{4,298}$	84
Engineering .	•				•	•	•	•	•	•		10
											\$39,351	51
					_							
	M	ORT	on S	TREE	T I	IPRO	VEM	ENT	s.			
Photographs .		•	•				•		•	•	\$44	00
0.777.4	3770 A	M	Aarr		Smr	) Ta Tarme	, 1,	unn/	XX 27 3.8	TO A TOPIC		
OAKLA	ир А	ND	ASH	LAND	TE	LEETS	, 11				٥.	
Photographs . Engineering .	•	•		•	•	•			$$33 \\ 644$	37		
Engineering .		•	•		•	•	•		011		\$677	37
											-	
	R	IVE	к Ѕт	REET	Co	NSTR	UCT	ion.				
Test holes .									\$195	43		
Photographs .									33 821	00		
Engineering .		•			•				821	50	@1 O4O	02
											\$1,049	90

### Expenditures from Special Appropriations, 1927.

	Balance from 1926.	Total Credits Including Balances Carried Over and Transfers,	Expended During Year 1927.	Balances Unexpended December 31, 1927.
Beacon Street Bridge, rebuilding	\$4,115 37	\$4,115 37		\$4,115 37
Bridges, repairs, etc	43,436 32	143,436 32	<b>\$117,</b> 359 43	26,076 89
Broadway Bridge, South Boston	67,709 36	77,709 36	71,985 27	5,724 09
Cambridge Street Bridge, re- building	16,894 92	16,894 92		16,894 92
Congress Street Bridge, plans, etc	13,882 04	13,882 04		13,882 04
Dartmouth Street Bridge	2,746 14	2,746 14		2,746 14
* Massachusetts Avenue Bridge	14,096 01	4,096 01		4,096 01
Tremont Street Bridge	53,224 93	53,224 93	3,172 26	50,052 67
West Newton Street Bridge	44,776 16	44,776 16	39,351 51	5,424 65
† Morton Street Improvements,			44 00	
† Oakland and Ashland Streets Improvements			677 37	
† River street reconstruction			1,049 93	
	\$260,881 25	\$360,881 25	\$233,639 77	<b>\$</b> 129,012 78

^{\$} \$10,000 transferred to Broadway Bridge, South Boston. † See also Paving Service.

Bridge Openings, 1927.

1 Number Openings,	Total	922	1,482	6,307	2,770	1,771	2,313	1,341	1,108	2,746	1,174	7,383	3,943	2,376	3,082	38,718
Number Cargoes,	latoT lo	482	1,701	1,693	1,977	740	752	499	484	1,003	395	1,909	1,491	723	1,623	15,472
BER S.	Total.	2,434	6,748	15,745	8,755	3,509	4,231	2,472	2,446	3,996	1,960	13,652	8,249	4,213	6,878	85,288
TOTAL NUMBER OF VESSELS.	Night.	144	1,484	1,208	420	817	315	118	126	148	224	3,022	728	370	1,604	10,728
Tora	Day.	2,290	5,264	14,537	8,335	2,692	3,916	2,354	2,320	3,848	1,736	10,630	7,521	3,843	5,274	74,560
RS.	Total.	512	2,859	874	3,032	1,132	009	474	587	1,295	458	3,331	1,953	632	2,891	20,630
Агс Отнева	Night.	6	730	88	164	103	12	5	43	44	94	496	62	38	801	2,689
An	Day.	503	2,129	286	2,868	1,029	588	469	544	1,251	364	2,835	1,891	594	2,090	17,941
	Total.	320	582	1,850	95	142	511	313	314	320	266	1,441	554	208	969	7,912
BARGES.	Night.	31	125	163	rů.	63	64	15	19	6	23	528	74	08	132	1,331
	Day.	289	457	1,687	90	29	447	298	295	311	243	913	480	428	564	6,581
	Total.	1,458	3,263	11,476	5,495	2,089	2,828	1,459	1,467	2,258	1,059	7,635	4,699	2,819	3,250	51,355
Tugs.	Night.	7.1	627	901	244	596	203	49	61	70	48	1,572	244	236	670	5,592
	Day.	1,387	2,636	10,575	5,251	1,493	2,625	1,410	1,406	2,188	1,011	6,063	4,455	2,583	2,580	45,663
SELS.	Total.	83	24	78	45	4	84	77	78	57	14	27	98	82	25	761
SAILING VESSELS	Night.	4	67	m	:	-	ಣ	61	· co	īO	:	П	က	4	1	31
SAILI	Day.	79	22	75	42	4	S1	75	75	52	14	26	833	78	24	730
*	Total.	61	20	1,567	91	142	208	149	:	99	163	1,218	957	172	16	4,830
STEAMERS.	Night.	29	:	153	1~	55	33	47	:	20	59	425	345	12	:	1,185
$S_{\mathrm{T}}$	Day.	32	20	1,414	84	87	175	102	:	46	104	793	612	160	16	3,645
		Broadway	Charlestown	Chelsea North	Chelsea South	Chelsea Street	Congress Street	Dorchester Avenue	Dover Street	* L Street	Malden	Meridian Street	Northern Avenue	Summer Street	Warren	Totals

* Now Summer Street Bridge, over Reserved Channel.

GRANITE AVENUE BRIDGE.*

	\$2,584 64	25 31	56 30	51 06	\$2,717,31
					9,
į	·	Ť	·	Ť	
5	•	٠	٠	•	
CHAMBER TRADUCE DUIDER	•	٠	٠	٠	
1	٠	٠	٠		
1					
A T 7					
1				:	
****					
5	laries				
	sa				
	Prawtenders' salaries	dateriai .	repairs .	. sənddne	

* Maintained jointly by County of Suffolk and town of Milton.

Granite Avenue Bridge Draw Openings from January 1 to December 31, 1927.

	Number Reninge.	latoT O to	303
	Number largoes.	IstoT O to	43
	BER S.	Total.	425
	Total Number of Vessels.	Night.	28
,	TOTA	Day.	397
	RS.	Total.	119
	Ась Отнекв.	Night.	26
	ALI	Total. Day. Night. Total. Day. Night. Total. Day.	93
		Total.	98
	Barges.	Night.	
		Day.	98
		Total.	199
	Tugs.	Night.	
	-	Day.	199
	SELS.	Total.	2
	SAILING VESSELS,	Night.	-
	SAILE	Day.	9
	, i	Total.	14
	Steamers.	Day, Night, Total, Day, Night.	1
	Ď.	Day.	13
	OPENINGS.	٠	

### FERRY SERVICE.

FINANCIAL STATEMENT FOR THE YEAR DECEMBER 31, 1927.	ENDING
1. Receipts.	
Total cash receipts during the year Cash in hands of tollmen at beginning of year	\$89,242 37 200 00
	\$89,442 37
Cash paid over to City Collector Cash in hands of tollmen December 31, 1927 .	\$89,242 37 200 00
	\$89,442 37
2. Appropriations and Expenditures.	
Received from annual appropriations for Ferry	\$547,038 06
Transferred from Lighting Service . 51 89	5,290 75
	\$552,328 81
Unexpended balances from special appropriations, January 1, 1927. \$368,044 01 Appropriation from taxes for ferry	
improvements, etc	393,044 01
Total expenditures	\$945,372 82 706,413 66
Unexpended balances of special appropriations, December 31, 1927	\$238,959 16
3. Result of Operations for the Year.	
Receipts for the year (net income) Ordinary expenses (maintenance	\$89,242 37
appropriation)	
Carried forward	\$89,242 37

^{*}Of this amount \$50,000 in loans has been authorized, but not issued.

Brought forward Depreciation on ferryboats Decrease in value of machinery and	\$602,045 80,114		\$89,242 37
tools	518	93	
Decrease in value of supplies on hand	252	72	
Increase in value of fuel on hand .	\$682,931 1,420		
Net outgo for the year			681,511 34
Net loss for the year		.*	\$592,268 97

^{*} Does not include expenditures for special appropriations.

Balance Sheet.

End of Fiscal Year, December 31, 1927.

		*\$238,959 16		13,350,729 78	\$13,589,688 94
LIABILITIES.	Current Liabilities: None.	Contingent Liabilities: Appropriations account	Fixed Liabilities: Capital of the city invested in the ferries, viz.: Total expenditures of all kinds for sixtynine years, including interest on ferry	Less total receipts8,280,404 04	
	\$200 00 5,159 70 7,598 87 607 84	\$13,566 41 * 238,959 16	² 610,100 00 1,190,174 04 4,670 38	\$2,057,469 99 11,532,218 95	\$13,589,688 94
ASSETS.	AVAILABLE ASSETS: Cash in hands of tollmen at close of year. Inventory of supplies, viz.: Fuel. Supplies for maintenance. Rents receivable.	Total available assets	Fixed Assers: Real estate, land and buildings¹. Ferryboats³. Machinery, tools, etc.	Total tangible assets	

Includes \$50,000 authorized, but not issued.

* Includes \$50,000	\$276,375 00 607,523 64 5,562 52 10,000 00	\$899,461 16	152,322 95
	1 Original purchase sort of 1913. New buildings, drops, slips, cost to 1913. Land, Lincoln's Wharf, cost to 1887. Land, Battery Wharf, cost, 1893.	North factor and the state form:	December 31, 1927

\$1,051,784 11

	\$2,178	386	
² Assessors' figures.	3 Total cost to date, per ferry books §	Less boats sold, depreciated or destroyed	

\$2,178,182 01 988,007 97	\$1,190,174 04
sors figures. cost to date, per ferry books oats sold, depreciated or destroyed	

### Comparative Balance Sheets at the Close of Each Year.

	January 31, 1924.	January 31, 1925.	December 31, 1925.	December 31, 1926.	December 31, 1927.
Assets.					
Cash, tollmen's capital	\$200 00	\$200 00	\$200 00	\$200 00	\$200 00
Rents receivable	392 35	489 21	592 34	583 34	607 84
Fuels and supplies in stock	23,097 11	20,088 22	18,366 96	11,589 19	12,758 57
City Treasurer (balance of appropriation)	113,072 86	217,676 36	1,020,064 26	368,044 01	238,959 16
Ferryboats (less depreciation)	914,754 98	857,439 71	800,124 44	1,270,288 27	1,190,174 04
Machinery and tools	1,624 14	4,163 58	3,747 23	4,634 31	4,670 38
Real estate, land and buildings (assessors' valuation)	610,100 00	610,100 00	610,100 00	610,100 00	610,100 00
Total tangible assets	\$1,663,241 44	\$1,710,157 08	\$2,453,195 23	\$2,265,439 12	\$2,057,469 99
Cost of avenues, etc., East Boston (previous to 1871) 1	315,815 68	315,815 68	315,815 68	315,815 68	315,815 68
Deficiency of assets (loss)	8,149,845 42	8,966,610 71	9,726,416 60	10,465,340 20	11,216,403 27
Totals	\$10,128,902 54	\$10,992,583 47	\$12,495,427 51	\$13,046,595 00	\$13,589,688 94
Liabilities.					
Capital invested by City of Boston to date	\$10,015,829 68	\$10,774,907 11	\$11,475,363 25	\$12,678,550 99	\$13,350,729 78
Appropriations account (credit balances)	113,072 86	217,676 36	1,020,064 26	368,044 01	238,959 16
Total liabilities	\$10,128,902 54	\$10,992,583 47	\$12,495,427 51	\$13,046,595 00	\$13,589,688 94
Detail	s of Capital Inve	ested by the City	of Boston.	1	
Total expenditure to date per ferry books.	\$17,658,444 98	\$18,501,559 12	<b>\$</b> 19,273,121 91	\$20,540,211 31	\$21,296,977 47
Interest of debt for the year (per City Auditor's reports)	44,585 00	41,710 00	38,752 50	50,352 50	55,007 50
Interest, previous years, etc. (net debits, per City Auditor's reports),	279,148 85	279,148 85	279,148 85	279,148 85	279,148 85
Total expenditures	\$17,982,178 83	\$18,822,417 97	\$19,591,023 26	\$20,869,712 66	\$21,631,133 <b>82</b>
Deduct total receipts paid to City Collector	7,966,349 15	8,047,510 86	8,115,660 01	8,191,161 67	8,280,404 04
Excess expenditures, capital	\$10,015,829 68	\$10,774,907 11	\$11,475,363 <u>25</u>	\$12,678,550 99	\$13,350,729 78

¹ Included in deficiency of assets in Table 4.

Comparison of Receipts, Appropriations and Expenditures.

Comparison of Neceptes, Appropriations and Expendituties.	propriacions	and Expen	ultures.		
	1923–24.	1924–25.	1925. (11 months.)	1926.	1927.
Receipts.					
From foot passengers (tollmen)	\$31,059 13	\$27,347 91	\$22,254 80	\$23,087 75	\$21,907 61
From foot passes (office sales)	254 40	280 20	264 70	361 30	309 90
From extra passengers on teams (gatemen)	1,212 80	1,525 94	727 12	800 61	720 35
From team tickets (office sales)	1,621 50	1,947 00	2,026 00	2,307 00	2,753 50
From strip team tickets (tollmen)	15,442 00	13,204 50	11,400 50	12,531 00	12,187 00
From cash fares for teams (gatemen)	41,072 74	35,796 62	30,542 28	35,328 46	35,429 77
From free ferries July 4	1 00	1 00	1 00	1 00	1 00
Total from rates	\$90,663 57	\$80,103 17	\$67,216 40	\$74,417 12	\$73,309 13
From rents.	398 02	417 16	368 02	523 04	489 50
From old material sold	122 03	89 79	15 00	12 00	00 89
From other sources.	586 76	576 70	549 73	549 50	* 15,375 74
Total ordinary receipts.	\$91,770 38	\$81,161 71	\$68,149 15	\$75,501 66	\$89,242 37
Office:					
1 Division engineer's salary (part)	\$1,250 00	\$1,250 00	\$833 33	\$1,250 00	\$1,250 00
² General foreman and cashier	4,968 59	5,013 70	4,704 06	5,259 69	5,416 09
Clerk	1,284 29	1,386 59	1,281 13	1,459 83	1,500 00
Refired veterans' pensions	7,449 09	7,633 27	6,442 76	6,247 13	4,161 53
Retired employees' pensions.	3,240 00	2,921 00	2,404 00	2,215 00	1,942 00
Medical inspector (part).	83 34	83 33	91 67	91 67	100 00
Stationery	160 54	43 04	304 18	142 00	129 86

Printing	1,178 60	09 986	1,283 89	1,594 75	1,281 43
Telephones	246 17	249 52	237 89	270 02	279 30
Advertising.	33 00	38 50	7 50	53 20	101 73
Car fares.	97 35	88 17	101 45	109 73	127 26
Postage	8 00	4 00	20 00	4 00	4 00
Premiums, surety companies	85 00	82 00	85 00	94 00	91 00
Total office expenses.	\$20,083 97	\$19,852 72	\$17,796 86	\$18,791 02	\$16,384 20
Ferryboats and landings:					
³ Employees (wages)	\$291,878 59	\$315,339 26	\$302,376 44	\$338,261 69	\$367,640 21
Fuel.	92,904 36	75,278 43	62,388 96	66,738 24	67,657 76
Teaming, weighing coal, etc	2,986 03	3,296 97	3,152 02	4,331 75	2,848 00
Supplies	15,567 00	22,490 54	15,506 25	17,664 04	17,207 55
Gas.	1,007 43	752 33	968 61	1,149 09	1,272 55
Oil	1,769 82	2,543 80	1,125 48	1,857 99	1,877 44
Electric light	4,154 60	4,973 19	4,579 53	5,848 39	6,583 97
Towing teams by electric motors	166 13	604 57	843 42	954 13	121 21
Repairs of boats	50,977 87	51,230 02	51,571 46	48,702 43	58,516 16
Repairs of buildings, piers and drops	13,908 12	24,814 05	9,528 99	9,103 14	9,455 95
Furnishings.	255 50	256 00	326 50	319 25	427 45
4 Other expenditures	3,025 36	2,095 58	2,076 17	2,595 49	2,336 36
Total	\$198,684 78	\$523,527 46	\$472,240 69	\$516,316 65	\$552,328 81
* Includes \$13.447.85 received from sale of ferryboat "Governor Russell" and \$1.387.85 from sale of ferryboat "Huch O'Brien."	or Russell" and	81.387.85 from s	ale of ferryboat " I	Hugh O'Brien "	

** Includes \$13.447.5 received from sale of ferryboat " Governor Russell" and \$1,387.35 from sale of ferryboat " Hugh O'Brien."

** Included in employees (wages) after February 1, 1916, in office books.

** Includes payment under Workingmen's Compensation Act.

**Includes payment under Workingmen's Compensation Act.

**Includes repairs of coal carts, medical attendance, etc.

Comparison of Receipts, Appropriations and Expenditures.—Concluded.

	1923–24.	1924–25.	1925. (11 months.)	1926.	1927.
EXPENDITURES FROM SPECIAL APPROPRIATIONS.					
East Boston Ferry, improvements, etc	\$165,179 21	\$202,726 78	\$192,096 24	\$154,879 78	\$9,930 44
Ferryboats, repairs, etc.	172 10				
Ferryboat "Noddle Island"		8,290 30			
Ferry improvements, etc.	79,814 01	63,984 60	62,273 08	24,404 15	1,761 90
East Boston Ferry, two additional boats, and other permanent improvements			3,242 78	532,736 32	142,392 51
Total expenditures, regular and special	\$743,850 10	\$798,529 14	\$729,852 79	\$1,228,336 90	\$706,413 66
Balances in treasury unexpended	113,072 86	217,676 36	1,020,064 26	368,044 01	238,959 16
APPROPRIATIONS.					
Regular annual appropriations	\$498,684 78	\$521,688 80	\$488,910 17	\$533,021 57	\$547,038 06
Transfers from other sources	1 22,293 34	1 1,838 66			1 5,290 75
East Boston Ferry, improvements, etc		3 295,000 00	¢ 155,000 00		
Ferryboat "Noddle Island"	2 81,002 23	4 6,721 13			
Ferry improvements, etc.		6 77,884 05	7 80,000 00	00 000'09 6	25,000 00
East Boston Ferry, two additional boats			s 825,000 00		
	\$601,980 35	\$903,132 64	\$1,393,910 17	\$593,021.57	\$577,328 81

Transferred from other appropriations.

1 Transferred from other appropriations \$31,002.93 appropriation from taxes, \$50,000.
3 Appropriation from loan inside debt limit, \$275,000 transferred from other appropriations, \$675,000 transferred from there appropriations, \$6,721.13.
6 Appropriation from taxes, \$60,000 transferred from other appropriations, \$17,884.05.
6 Loan of \$80,000 inside of debt limit transferred from other appropriations, \$75,000.

7 Appropriation from taxes, \$80,000.

8 Loan of \$750,000 outside of debt limit; appropriation of \$75,000 from taxes. \$60,000.

Appropriation from taxes, \$60,000.

Expenditures for avenues, paving interest, etc., previous to the purchase of the	1858=59.
C 1 11 11 11	\$444,101 30
Purchase of the ferries, April, 1870	276,375 00
Expenditures for ferryboats since April, 1870,	2,178,182 01
Expenditures for new buildings, piers, drops,	2,110,102 01
etc.	1,457,143 39
Expenditures for tools and fixtures (prior to	1,101,110 00
1910)	14,752 46
Expenditures for land from Lincoln's Wharf	11,102 10
in 1887	5,562 52
Expenditures for land from Battery Wharf	0,002 02
1 1000	10,000 00
ın 1893	10,000 00
Total expenditures on capital account .	\$4,386,116 68
Expenditures for repairs of all kinds	2,348,945 84
	2,663,291 87
Expenditures for fuel	9,490,269 66
Expenditures for salaries and wages	2,742,509 77
Expenditures for all other purposes	2,142,509 11
	\$21,631,133 82
Total Receipts from Ferries Since 18	58=59.
Receipts from rents, etc., previous to pur-	
chase of ferries	\$29,588 56
Receipts from ferry tolls since purchase of	<i>\$20,000 00</i>
ferries	
	7.948.377 20
Receipts from rents since purchase of	7,948,377 20
Receipts from rents since purchase of ferries	
ferries	71,671 76
ferries	
ferries	71,671 76 167,403 14
ferries	71,671 76
ferries	71,671 76 167,403 14 32,828 53
ferries	71,671 76 167,403 14
ferries	71,671 76 167,403 14 32,828 53 30,734 85
ferries	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04
ferries	71,671 76 167,403 14 32,828 53 30,734 85
ferries	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04
ferries	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04 200 00
ferries Receipts from sale of ferryboats Receipts from all other sources, per ferry books Receipts from all other sources, additional, per City Auditor  Total receipts from all sources Less amount with tollmen as capital  Total receipts, auditor's reports	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04 200 00 \$8,280,404 04
ferries Receipts from sale of ferryboats Receipts from all other sources, per ferry books Receipts from all other sources, additional, per City Auditor Total receipts from all sources Less amount with tollmen as capital Total receipts, auditor's reports REGULAR ANNUAL (ORDINARY) AND SPECIAL	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04 200 00 \$8,280,404 04 Appropriation
ferries Receipts from sale of ferryboats Receipts from all other sources, per ferry books Receipts from all other sources, additional, per City Auditor Total receipts from all sources Less amount with tollmen as capital Total receipts, auditor's reports REGULAR ANNUAL (ORDINARY) AND SPECIAL (EXTRAORDINARY) OF THE FERRY SERVICE	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04 200 00 \$8,280,404 04 Appropriation
ferries Receipts from sale of ferryboats Receipts from all other sources, per ferry books Receipts from all other sources, additional, per City Auditor Total receipts from all sources Less amount with tollmen as capital Total receipts, auditor's reports REGULAR ANNUAL (ORDINARY) AND SPECIAL (EXTRAORDINARY) OF THE FERRY SERVICE ENDING DECEMBER 31, 1927.	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04 200 00 \$8,280,404 04 Appropriation
ferries Receipts from sale of ferryboats Receipts from all other sources, per ferry books Receipts from all other sources, additional, per City Auditor Total receipts from all sources Less amount with tollmen as capital Total receipts, auditor's reports REGULAR ANNUAL (ORDINARY) AND SPECIAL (EXTRAORDINARY) OF THE FERRY SERVICE ENDING DECEMBER 31, 1927. Appropriations (regular) for the year ending	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04 200 00 \$8,280,404 04 Appropriation for the Year
ferries Receipts from sale of ferryboats Receipts from all other sources, per ferry books Receipts from all other sources, additional, per City Auditor  Total receipts from all sources Less amount with tollmen as capital  Total receipts, auditor's reports  REGULAR ANNUAL (ORDINARY) AND SPECIAL (EXTRAORDINARY) OF THE FERRY SERVICE ENDING DECEMBER 31, 1927.  Appropriations (regular) for the year ending December 31, 1927	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04 200 00 \$8,280,404 04 Appropriation
ferries Receipts from sale of ferryboats Receipts from all other sources, per ferry books Receipts from all other sources, additional, per City Auditor Total receipts from all sources Less amount with tollmen as capital Total receipts, auditor's reports REGULAR ANNUAL (ORDINARY) AND SPECIAL (EXTRAORDINARY) OF THE FERRY SERVICE ENDING DECEMBER 31, 1927. Appropriations (regular) for the year ending	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04 200 00 \$8,280,404 04 Appropriation for the Year
ferries Receipts from sale of ferryboats Receipts from all other sources, per ferry books Receipts from all other sources, additional, per City Auditor  Total receipts from all sources Less amount with tollmen as capital  Total receipts, auditor's reports  REGULAR ANNUAL (ORDINARY) AND SPECIAL (EXTRAORDINARY) OF THE FERRY SERVICE ENDING DECEMBER 31, 1927.  Appropriations (regular) for the year ending December 31, 1927	71,671 76 167,403 14 32,828 53 30,734 85 \$8,280,604 04 200 00 \$8,280,404 04 Appropriation for the Year

Brought foward \$5,238 86 Transferred from Lighting Service	\$547,138 06 5,290 75
Amount of expenditures (regular) for the year	\$552,328 81
SPECIAL APPROPRIATIONS.	
EAST BOSTON FERRY, IMPROVEMENTS, ETC.	010.010.07
Unexpended balance, January 1, 1927	\$10,612 67 9,930 44
Unexpended balance December 31, 1927	\$682 23
Expenditures for year made up as follows: Pay rolls, labor, etc. Travel expense Amount paid to W. H. Ellis & Son Company, under contract for foundation for ferry bridge, North Ferry: Amount of contract \$29,287 56	
Less amount paid in 1926	9,785 78
Total	\$9,930 44
East Boston Ferry, two additional boats and other permanent improvements:	
Unexpended balance, January 1, 1927 Expenditures for year 1927	\$289,020 90 142,392 51
Unexpended balance December 31, 1927	\$146,628_39
Expenditures for year made up as follows: Pay rolls, labor and engineering Travel expense Labor and materials testing pontoons on North Ferry Miscellaneous Amount paid to Joseph A. Singarella, under contract,	\$4,454 98 76 24 107 10 115 82
for remodeling canopy, North Ferry: Contract price \$1,620 00 Extra work under order 278 50  Amount paid to W. H. Ellis & Son Company, under contract for ferry bridge, North Ferry, East Boston:	1,898 50
Amount of work done under contract . \$25,988 62 Extra work under order	
Less 15 per cent retained	
Amount paid to J. Edward Ogden Company, Inc., under contract for electrically operated ferry bridges with gallows frame and accompanying machinery:  Amount of contract \$140,500 (95 per cent) completed \$133,475 00 ess 15 per cent retained 20,021 25	
	113,453 75
	\$142,392 51

Ferry improvements, etc.: Unexpended balance, Januar Appropriation from taxes	ry 1,	1927	7 .			
Expenditures for year .						\$93,410 44 1,761 90
Unexpended balance December	ber :	31, 19	927			\$91,648 54
Expenditures for year made up						
Advertising						\$72 75
Lumber						330 81
Returns electric plug rents						$394 \ 02$
One Bryant gas fire boiler						964 32
						\$1,761 90

### RECEIPTS AT EACH FERRY.

### North Ferry.

FROM TOLLMEN.	From Foot Passengers.	From Tickets.	Totals.
Boston side	\$4,264 02	\$1,986 50	\$6,250 52
East Boston side	3,840 82	2,410 00	6,250 82
Totals	\$8,104 84	\$4,396 50	\$12,501 34
From tollmen From gatemen: 20,179 foot passengers a Cash fares for teams .	t 1 cent,	\$201 79 7,276 61	\$12,501 34 7,478 40
Total at North Ferry			\$19,979 74

### South Ferry.

From Tollmen.	From Foot Passengers.	From Tickets.	Totals.
Boston side	\$7,179 79	\$4,093 00	\$11,272 79
East Boston side	6,622 98	3,697 50	10,320 48
Totals	\$13,802 77	\$7,790 50	\$21,593 27

From tollmen From gatemen:					. \$21,593 27
51,856 foot passengers at			9	\$518 50	
Cash fares for teams .	•	٠		8,153 16	28,671 72
Total at South Ferry					\$50,264 99
North and South Ferries . Tickets paid for at ferry offi Received in lieu of free ferries	ce s Jul	y 4, 1			\$70,244 73 3,063 40 1 00
Total from rates .					\$73,309 13
Rents for the year Headhouse privileges .				•	489 50 400 00
Care of public telephone boo	oths				48 00
Commission on public telephold material sold	one	٠			92 04 68 00
Boats sold					14,835 70
Total receipts for year				٠	\$89,242 37
TRAVEL ON THE FERRI				Januai	
TO DECEMBER	31,	1927		NCLUSI North Ferr	
Foot passengers at 1 cent ear Foot passengers by ticket	ch		•	830,663 10,360	3 1,432,133
Total foot passengers				841,023	1,452,209
One-horse teams, light motor	truc	eks.			
pleasure carriages and run Two-horse pleasure carriages	abou	uts,		94,753	219,961
and touring cars		.1		78,476	
Two-horse teams and motor Three-horse teams and heavy				85,312	2 163,039
trucks				1,261	2,161
Four-horse teams Free teams, hacks and m	ot	o r		150	1,153
vehicles				10,295	18,033
				270,247	723,471

### Motor Vehicle Traffic (Reports of Captains).

January 1, 1927, to December 31, 1927.

	North Ferry.	South Ferry.	Total.
Runabouts	1 28,252	² 86,431	114,683
Touring cars	³ 98,639	4 357,857	456,496
Trucks	5 72,321	6 183,004	255,325
Totals	199,212	627,292	826,504
	cludes 1,845 free. cludes 3,654 free.		
Total paying foot passenge	rs		2,293,232
Total foot passengers of	carried .		2,293,232
Total paying teams Total free teams			965,390 28,328
			993,718

TOTAL TRAVEL OF BOTH FERRIES FROM FEBRUARY 1, 1922, то December 31, 1927.

	1922-23.	1923-24.	1924-25.	1925. (11 mons.)	1926.	1927.			
One-horse teams *	502,407	445,839	406,336	331,086	348,147	314,714			
Two-horse teams †	341,257	314,672	291,710	222,543	263,763	248,351			
Three-horse teams	1,850	1,548	1,249	736	1,868	3,422			
Four-horse teams	6,061	4,816	2,105	1,514	2,380	1,303			
Two-horse carriages, hacks ‡	368,711	366,846	338,031	290,361	365,540	397,600			
Two-cent tolls, handcarts, etc.	4,333	4,409	3,098	2,282					
Drag-wheels, etc	2	5	35						
Paid teams at both ferries	1,224,621	1,138,135	1,042,564	848,522	981,698	965,390			
Free teams at both ferries	29,349	26,197	27,988	24,417	26,195	28,328			
Total teams at both ferries	1,253,970	1,164,332	1,070,552	872,939	1,007,893	993,718			
Foot passengers paid	3,711,491	3,224,419	2,844,317	2,298,192	2,418,209	2,293,232			
Foot passengers free	1,865	1,650	1,584	270					
Total foot passengers	3,713,356	3,246,089	2,845,901	2,298,462	2,418,209	2,293,232			

Note.—Team travel includes automobiles.
* Includes one-seat automobiles. † Includes motor trucks. ‡ Includes two-seat automobiles.

### APPENDIX C.

## REPORT OF THE DIVISION ENGINEER OF THE HIGHWAY DIVISION.

Boston, January 2, 1928.

Mr. James H. Sullivan,

Commissioner of Public Works.

Dear Sir,— I submit herewith a statement of the activities and expenditures of the Lighting and Paving Services for the year ending December 31, 1927.

The maintenance expenditures for the Highway

Division for the year were as follows:

Lighting Service Paving Service				\$953,642 82 1,860,155 10
Total .				\$2,813,797 92

### Maintenance.

The division forces were engaged during the year resurfacing macadam roadways, patching and repairing

defects in roadways and sidewalks.

The Brighton yard plant has been called upon to furnish hot and cold mixed asphalt and tar for the various parts of the city and the repair work on asphalt and bitulithic pavements out of guarantee. This work has been done by the division forces.

The snow plowing of streets in the suburbs was done under the direction of the district foremen. This year the work was greatly extended so that every street in the residential parts of the city was kept open to travel. This is the first time such a result has been accomplished.

### Construction.

During the year contracts were awarded to do work on about one hundred and three streets. There were about 45,000 yards of recut granite block laid; 139,000 yards of sheet asphalt; 133,000 yards of bitulithic, all laid on a concrete base; 9,800 yards of reinforced concrete, and 150,000 yards of artificial stone sidewalks.

Forty-two streets laid out under the "Highways,

making of," appropriation were constructed.

The following are important thoroughfares that were reconstructed: Lexington street, Meridian to Shelby street; Medford street, Chelsea to Main street; A street, Congress street to Dorchester avenue; East Broadway, L street to Farragut road; Dock square and Faneuil Hall square; Boylston street, Tremont to Charles street and Berkeley to Exeter street; Park square, Boylston street to Columbus avenue; Columbus avenue, Park square to Stuart street; Stuart street, Broadway to Columbus avenue; Washington street, Dover street to Massachusetts avenue; Columbus avenue, Dartmouth to Northampton street; Stuart street, Huntington avenue to Dartmouth street; Beacon street, Massachusetts avenue to Raleigh street; Brookline avenue, Brookline line to Fenway; Longwood avenue, Brookline avenue to Riverway; Crawford street, Warren street to Walnut avenue; Harold street, Walnut avenue to Seaver street; Dudley street, Harrison avenue to Blue Hill avenue: Harrison avenue, East Lenox street to Warren street; Freeport street, Dorchester avenue to Old Colony Parkway; Quincy street, Warren street to Columbia road.

The following is a list of streets that were widened and reconstruction ordered. The work was commenced during the year: River street, from Blue Hill avenue to Everett square, Hyde Park; Kneeland street, Washington street to Atlantic avenue; Ashland street, Wood avenue to Wilmot street; Oakland street, Orlando to Hebron street; Morton street, Druid to Washington street, was graded and work completed during the year.

### STREET SIGNS.

During the year the Highway Division has commenced the erecting of new street signs. The sign plate is of blue enamel background with a white porcelain letter; they are inclosed in a malleable iron container frame bolted to an ornamental malleable section, the whole being attached to the post with steel clamps, nuts and bolts.

Two sizes of malleable iron sections are used, one to fit the iron pipe posts and one to fit the boulevard type of street lamp posts. The pipe posts are of standard wrought-iron pipe of  $3\frac{1}{2}$  inches inside diameter, set 3 feet in the ground. A galvanized malleable iron acorn cap is used with each pipe post. At the close of the year these new street signs have been set up in all of the city proper as far south as Northampton street and the main thoroughfares from Dorchester, Roxbury, West Roxbury and Brighton.

### LIGHTING SERVICE.

The Lighting Service has installed the boulevard type of white way lamps in the following streets: Newbury street, Arlington to Clarendon street; Corinth, Birch, Poplar and South streets in the Roslindale business section; Blue Hill avenue, between Talbot avenue and Morton street.

Eighteen street lights have been installed on the new Southern Artery. The new posts are of the Westinghouse Sheridan type with hollow spun concrete posts.

The new light unit is a fifteen hundred candle power multiple incandescent twenty ampere lamp with the rippled glass globe covering the lamp unit. These lamps are supplied by resonant controlled relays. When this work is completed there will be sixty-seven of these new lamps installed on the new Southern Artery.

Respectfully,

Joshua Atwood, Division Engineer.

### HIGHWAY DIVISION — LIGHTING SERVICE.

FINANCIAL STATEMENT.							
Expenditures January 1, 1927, to December 31, 1927.							
Electric Lighting:	to December	, 0	1, 10%1.				
Arc.							
Edison Electric Illuminating							
	\$533,350	06					
Company	фооо,ооО	90					
Company	27 730	Ω4					
Company	21,100		\$561,090 00				
			\$501,050 OO				
Incandescen	ı t						
Edison Electric Illuminating							
Company	\$114,644	06					
Charlestown Gas and Electric	\$114,044	90					
Company	1,316	25					
Company	1,010	20					
Company fire alarm	274	gg					
company meaning.			116,236 20				
			110,200 20				
Gas Lighting:							
Boston Consolidated Gas Com-	@0.4E 000	~ -					
pany	\$247,222	16					
	19 117	70					
Company	13,117	10					
Company fire alarm	601	16					
Company me alarm	001	40	260,941 67				
G 1 4 3 777			200,341 07				
Salaries and Wages:							
Division Engineer (part of) .	\$1,250						
Clerk	2,358						
Stenographer and clerk	346						
Lighting inspector	1,858	33	F 010 FF				
4			5,812 75				
Automobile Expense:		0.0					
Gasolene, oil, etc	\$111						
Registration	10						
Shoes and tubes, new and repairs,	$\frac{11}{764}$						
Supplies	764 46						
Repairs	46	48	944 82				
			944 04				

$Brought\ forward\ .$						\$945,025 44	Ŀ
Construction: Installing lamps and pos						4.061.00	
relocating lamps and p  Office Expenses:	osts	•	٠	•	•	4,961 29	,
Printing				\$120			
Postage Stationery and periodical		٠		$\frac{32}{34}$			
stationery and periodical		•				186 42	)
Miscellaneous.	,						
Travel expenses (car fare Typewriter repairs and	$_{ m insp}$	ec-		\$25	00		
tion				12	00		
Gas lamp posts				3,878	00	2.015.00	
			_			3,915 00	_
Total						\$954,088 15	
Less rebates on installation	ons	•	٠	•		445 33	,
Total						\$953,642 82	,
							,
Revenue Credit					ue.		
Lighting Boston and Cambr.						\$1,462 37	
Damage to posts		•			•	726 87	
						\$2,189 24	

The following is a statement of the work done during the year under the supervision of the Division Engineer.

Arc lamps have been provided for skating and tobogganing during the season at Franklin Field, Franklin Park and Wood Island Park, the same as in years past.

Boulevard type white way arc lamps have been installed in Park square, Providence street, Columbus avenue, Dock square, Kneeland street, Newbury street, Washington street, between Dover street and Massachusetts avenue, city proper; Audubon road and Fenway, Roxbury; New road, Circuit Drive, Franklin Park; Corinth street, Birch street, Poplar street, South street, West Roxbury; Hyde Park avenue, Hyde Park.

Boulevard type white way incandescent lamps have been installed on Huntington avenue, city proper; New Southern Artery, Blue Hill avenue, between Talbot avenue and Morton street, Dorchester. Thus throughout the city the lighting system has been increased including the boulevard type and reinforced cement posts by the installation of 115 arc lamps, 306 incandescent lamps and 81 gas lamps at various locations.

Petitions and requests for new lamps received from citizens and from officials, also complaints in relation to the Lighting Service have been investigated and attended to. All streets in the underground district prescribed for the year have been inspected and the necessary changes and additions have been made.

The number of miles of streets and ways lighted by

this service is as follows:

Public streets and alleys								
Public footways . Park roads, footways,	or	ivate	str	eets	and	alle	evs	ð.JJ
approximately .								290.79
Total								926 00

During the year the following defects were reported by the police: arc lamps, 4,575; incandescent, 1,669 and

gas lamps, 1,281.

There are in operation 21,668 arc, incandescent and gas lamps, divided as follows: 6,093 arc, 5,532 incandescent, 9,878 single mantle gas lamps and 165 single mantle fire alarm gas lamps.

La Magnetite arc lamps Tungsten lamps . Single mantle gas lamps Single mantle gas lamps						160 329 144 20 653
Lami	es I	Disco	ONTIN	VUED		
Magnetite arc lamps Tungsten lamps . Single mantle gas lamps			:		•	*45 23 83 — 151

^{*} Forty-two series magnetite arc lamps changed to 1,500 candle power series incandescent lamps. One 40 candle power series incandescent lamp changed to 125 candle power series incandescent lamp.

The following table shows the work of setting and repairing and altering lamp-posts, brackets, service, etc.:

Shades.	12			:	7	15	
Set in Place of Brackets.		:				eo	
Cleared.		:	:	:	:	123	
Laid.					:		
Relaid.	12	:			:	35	:
Repaired, Relaid, Laid, Cleared, Place of Shades,						9	
Unused Posts Removed.						57	4
Straight- Reset to Unused Ened. Grade. Removed.	56				10	98	
Straight- ened.						31	
Shifted to New Location.	17	:			10	10	:
Set in Place of Broken Posts.	I	:				179	
Set for Lamps.	158	61	18	30	241	144	
	Are posts	Are brackets	Cement posts	Boulevard posts	Mazda fixtures	Gas posts	Gas brackets.

The following table shows the number of lamps of various types in use on January 1, 1928, as compared with the number in use on January 1, 1927.

	January, 1928.	January,,1927.	Increase or Decrease.
Single mantle gas	9,878	9,817	61
Fire alarm gas	165	145	20
Magnetite series	6,093	5,978	115
Tungsten-incandescent	5,532	5,226	306
	21,668	21,166	502

### STREET LAMP OUTAGES.

Rebates for lamps not lighted on schedule time or out before the proper time have been received on the various monthly bills as follows:

D _{ATE} .	Arc.	Incan- descent.	Gas.
January, 1927	210.82	3.29	64.67
February	165.52	9.66	13.44
March	107.42	3.20	13.57
April	50.76	1.53	8.90
May	88.90	2.52	6.95
June	42.97	12.74	2.39
July	66.26	1.57	3.02
August	104.01	7.04	4.24
September	77.06	2.06	3.76
October	90.29	2.40	9.32
November	179.25	9.18	10.15
December	155.68	5.47	10.78
	1,338.94	60.66	151.19

### GAS LIGHTING.

There are 9,878 single mantle gas lamps and 165

single mantle fire alarm gas lamps.

The city furnishes the lamp-posts, the gas company sets the lamp-posts and provides service pipes laid from the gas mains to the top of the posts; maintain all such pipes and posts in good condition and repair, furnish gas, lanterns, burners and all other necessary equipment including labor for lighting and care.

The Lighting Service provides for the gas, lighting and care of fire alarm signal lamps and the Fire Depart-

ment for the posts, setting and repairing of same.

ias Lamps.

Total Cost per Lamp per Annum.	\$26 20 26 20	26 20 26 20
Cost per Lamp for Lighting and Care per Annum.	\$15 20 15 20	15 20 15 20
Cost of Gas per Lamp per Annum.	\$11 00	11 00 11 00
Hours of Burning per Annum.	3,886.45	3,886.45
Gas Consumed per Hour.	3 feet. 3 feet.	3 feet. 3 feet.
Rated Candle Power,	09	09
Type of Lamp.	Single mantle. Single mantle. F. A.	Single mantle. Single mantle. F. A.
Number of Lamps.	9,372	506 23
Gas District.	South Boston, East Boston, Dorchester, Roxbury, Brighton, West Roxbury.	Charlestown
Ілантіма Сомтваст.	Boston Consolidated Gas Com- pany.* South Boston, East Bos- ton, Dorchester, Rox- bury. Brighton, West Roxbury.	Charlestown Gas and Electric Charlestown

* Ten-year contract approved May 20, 1924.

There are 6,093 magnetite are lamps, 2,081 40 candle power, 3,125 80 candle power, 30 100 candle power; 55 132 candle power; 32 250 candle power; 11 528 candle power; 15 1,000 candle power; 23 950 candle power; 160 1,500 candle power incandescent lamps.

The electric companies provide and set the lampposts, except the lamp-posts for incandescent lamps supplied from underground circuits, furnish lamps, overhead wires, underground conduits, cables and connections and all other necessary equipments and maintain them in good condition and repair.

The lighting rates for electric lamps are in accordance

with the following table:

Description of Lamps.	Fixed Costs per Lamp per Year.	Running Cost per Lamp Hour,
40 candle power incandescent lamp, series	\$10 00	.22 cent
40 candle power incandescent lamp, multiple	10 00	.22 cent
36 candle power incandescent lamp, multiple	10 80	.26 cent
80 candle power incandescent lamp, series	10 80	.26 cent
100 candle power incandescent lamp, series	12 00	.30 cent
132 candle power incandescent lamp, multiple	13 50	.36 cent
250 candle power incandescent lamp, series	18 00	.6 cent
528 candle power incandescent lamp, multiple	32 00	1 cent
1,000 candle power incandescent lamp, series	34 00	1.4 cent
950 candle power incandescent lamp, multiple	32 00	1.3 cent
1,475 candle power incandescent lamp, multiple	36 00	1.5 cent
1,500 candle power incandescent lamp, series	36 00	1.5 cent

A deduction at the rate of 1 cent per hour for lamps of 100 candle power or less and 5 cents per hour for all other lamps is made for outage.

Arc Lamps.

Company,	Number of Lamps.	Connected.	Type of Lamps.	Type of Circuits.	Terminal.	Lighting Hours.	Cost of Lamp per Annum.
Patron Pleading Illuminating Commens	878,1	Overhead.	Magnetite.	Magnetite. Series 6.6 amp. D. C.	528	3,827	\$93 42
ratison forcent mannaging company	3,915	Underground.	Magnetite.	Underground. Magnetite. Series 6.6 amp. D. C.	528	3,827	93 42
Charlestown Cas and Plastric Communic	226	Overhead.	Magnetite.	Magnetite, Series 6.6 amp. D. C.	528	3,827	93 42
	74	Underground.	Magnetite.	Underground. Magnetite. Series 6.6 amp. D. C.	528	3,827	93 42
_	_	_				_	

Nore. — In the above the candle power figures are the official designations. The wattage figures are here eliminated.

Incandescent Lamps.

Сомрану.	Number of Lamps.	Type of Lamps.	Type of Circuits.	Candle Power.	Lighting Hours.	Cost of Lamp per Annum.
	1000	Tungsten.	Series 6.6 amp. D. C.	Ş	1	
	2,004	Tungsten.	Multiple amp. D. C.	40	3,827	\$18 42
	9 108	Tunanton	Multiple amp. D. C.	99	100 0	,
	671'e	ungsten.	Series amp. D. C.	80	3,827	20 75
	30	Tungsten.	Series.	100	3,827	23 48
Edison Electric Illuminating Company	555	Tungsten.	Multiple.	132	3,827	27 28
	32	Tungsten.	Series 6.6 amp. D. C.	250	3,827	40 97
	11	Tungsten.	Multiple amp. D. C.	528	3,827	69 28
	23	Tungsten.	Multiple.	950	3,827	81 76
	30	Tungsten.	Multiple.	1,475	too	9
	130	Tungsten.	Series amp. A. C.	1,500	758'6	93 42
Charlestown (see and Electric Commons	[17 F. A.	17 F. A. Tungsten.	Series 6.6 amp. D. C.	40	3,827	18 42
Orac Egge and about Company	15	Tungsten.	Series amp. D. C.	1,000	3,827	87 59

The wattage figures are Note.—In the above the candle power are the official designations.

FINANCIAL STATEM	ENT	Γ,	PAV	IN	G	SERVIC	E.
Main	TENA	ANCI	E.				
Appropriation, from taxes Transfer from Lighting Service	ee	\$1 ·	,860,6 15,4	678 476	74 36		
Transfer to Reconstructing Repairing Streets by Contr	g ar act	ıd	,876, 16,0		00	\$1,860,155	10
Expended during the year					=	51,860,155	
Special Ai	PPRO	PRIA	TION	s.			
Highways, making of: Amount expended during the						\$549,786	68
Departmen	$_{ m TAL}$	Equ	UIPME	INT.			
Balance January 1, 1927 . Expended during the year by						\$44,794 42,330	
Balance December 31, 1927	,		•			\$2,464	84
Garage, Hance	оск	Str	EET	YAF	RD.		
Balance January 1, 1927 . Expended during the year						\$884 529	
Balance December 31, 19	27					\$355	52
GRANOLITE	ис S	IDE	WALK				
Balance January 1, 1927 . Appropriation from taxes						\$52,597 50,000	
Expended during the year						\$102,597 76,028	69 23
Balance December 31, 1927						\$26,569	46
Land, E.	AST ]	Bos	TON.				
Balance January 1, 1927 . Expended during the year			·:		<i>:</i>	\$640 0	00 00
Balance December 31, 1927						\$640	00

Permanent S	TRE	ет Р	AVE	MENT		
Appropriation. Loan inside t Expended during the year	he d	lebt l ·	$\inf_{\cdot}$			\$500,000 00 436,489 73
Balance December 31, 19						\$63,510 27
RECONSTRUCTING AND REP.	ATRI	ING S	STRE	ETS	ВV	CONTRACT
Balance January 1, 1927.				110	<i>D</i> 1	\$369,779 81
Appropriation from taxes	•	:		•	•	250,000 00
Appropriation from taxes Transfer from Paving Service						16,000 00
Revenue						600 00
						\$636,379 81
Expended during the year					٠	589,317 69
D-1 D1 21 1007	,					\$47.069.19
Balance December 31, 1927		•	•	•		\$47,062 12
Strei	er S	Signs	2			
D I I 1 100						\$25,000 00
Appropriation from taxes						25,000 00
Appropriation from taxes	•	•		•	•	
						\$50,000 00
Expended during the year						35,941 91
Balance December 31, 1927	7					\$14,058 09
Cambridge Stree	T A	ND (	Cour	т Ѕт	REI	ET.
Expended during the year						\$8,919 89
Dock Square and Faneui						
Expended during the year						\$47,051 13
		_				
Kneeland Str						
Expended during the year						\$41,692 03
Morton Stre						#00 001 01
Expended during the year	٠	•			٠	\$22,201 31
Tremont Stri	e Tech	Twn	DOVE	MCTONT	г	
						<b>@2 140 15</b>
Expended during the year	•	•	•	•	•	\$5,149 15
OAKLAND STREET AND AS	HLA	ND S	STRE	ET I	MPF	ROVEMENT.
Expended during the year						\$19,752 81
-						
RIVER STREET	Rı	ECON	STRU	CTIO	N.	
Expended during the year						\$5,840 88
1	-					,

### PAVING SERVICE.

### SUMMARY OF EXPENDITURES.

DUMMARI OF EXPENDITURES.	
Paving Service, maintenance	\$1,860,155 10
Highways, making of	549,786 68
Departmental equipment (Sanitary Service) ¹	,
Garage, Hancock street yard	$529 \ 35$
Granolithic sidewalks	76,028 23
Permanent street pavement	436,489 73
Reconstructing and repairing streets by contract,	
Street signs	35,941 91
Cambridge street and Court street	8,919 89
Dock square and Faneuil Hall square improve-	
ment	47,051 13
Kneeland street improvement	41 000 00
Morton street improvement	22,201 31
Morton street improvement	3,149 15
Oakland street and Ashland street improvement,	
River street reconstruction	
thiver sheet reconstruction	0,040 00
Total	\$2 606 0FF 90
Total	\$3,696,855 89
Income.  Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to Genera	ry 1, 1927, to
Statement showing the amount of bills	ary 1, 1927, to dl Revenue.
Statement showing the amount of bills posited with the City Collector from Janua	ry 1, 1927, to al Revenue. \$18,497 38
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to Genera Edgestone and sidewalk assessments	17 1, 1927, to al Revenue.  \$18,497 38 26,997 33
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to Genera Edgestone and sidewalk assessments	ry 1, 1927, to al Revenue. \$18,497 38
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments	17 1, 1927, to al Revenue.  \$18,497 38 26,997 33
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to Genera Edgestone and sidewalk assessments	\$18,497 38 26,997 33 13,389 37
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits  Labor, materials furnished, etc.	17 1, 1927, to al Revenue.  \$18,497 38 26,997 33
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits  Labor, materials furnished, etc.  Total.	\$18,497 38 26,997 33 13,389 37 \$58,884 08
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits  Labor, materials furnished, etc.  Total  AMOUNT PAID INTO THE CITY	\$18,497 38 26,997 33 13,389 37
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits  Labor, materials furnished, etc.  Total.	\$18,497 38 26,997 33 13,389 37 \$58,884 08
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits Labor, materials furnished, etc.  Total  AMOUNT PAID INTO THE CITY DURING THE YEAR.	\$18,497 38 26,997 33 13,389 37 \$58,884 08
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits Labor, materials furnished, etc.  Total  AMOUNT PAID INTO THE CITY  DURING THE YEAR.  Edgestone and sidewalk assessments	17, 1927, to all Revenue.  \$18,497 38 26,997 33 13,389 37 \$58,884 08  TREASURY  \$26,841 29
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits Labor, materials furnished, etc.  Total  AMOUNT PAID INTO THE CITY  DURING THE YEAR.  Edgestone and sidewalk assessments	ry 1, 1927, to ll Revenue. \$18,497 38 26,997 33 13,389 37 \$58,884 08 TREASURY \$26,841 29 26,674 33
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits Labor, materials furnished, etc.  Total  AMOUNT PAID INTO THE CITY  DURING THE YEAR.  Edgestone and sidewalk assessments  Permits Labor, material furnished, etc.  Labor, material furnished, etc.	\$18,497 38 26,997 33 13,389 37 \$58,884 08 TREASURY \$26,841 29 26,674 33 11,718 22
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits Labor, materials furnished, etc.  Total  AMOUNT PAID INTO THE CITY  DURING THE YEAR.  Edgestone and sidewalk assessments	ry 1, 1927, to ll Revenue. \$18,497 38 26,997 33 13,389 37 \$58,884 08 TREASURY \$26,841 29 26,674 33
Statement showing the amount of bills posited with the City Collector from Janua December 31, 1927, and credited to General Edgestone and sidewalk assessments  Permits Labor, materials furnished, etc.  Total  AMOUNT PAID INTO THE CITY  DURING THE YEAR.  Edgestone and sidewalk assessments  Permits Labor, material furnished, etc.  Labor, material furnished, etc.	\$18,497 38 26,997 33 13,389 37 \$58,884 08 TREASURY \$26,841 29 26,674 33 11,718 22

HIGHWAY DIVISION—PAVING SERVICE.

## Work Done by Contract.

	Old.	New.	Total Old and New.
Edgestone set	105,967 linear feet.	69,447 linear fect.	175,414 linear feet.
Crushed stone foundation for edgestone		4,858 " "	4,858 " "
Concrete base laid	16,973 square yards.	250,376 square yards.	267,349 square yards.
² Granite block paving laid, gravel base, gravel joints	6,293 " "	383 " "	9,676 "
³ Recut granite block paving laid, grout joints		57,526 " "	57,526 " "
4 Second-hand granite block paving laid with grout joints	1,617 square yards.	43,236 " "	44,853 " "
Sheet asphalt and binder laid		138,948 " "	138,948 " "
6 Bitulithic pavement laid	592 square yards.	131,902 "	132,494 " "
7 Concrete pavement laid		26,097 "	, , , , , , , , , , , , , , , , , , , ,
Wood block pavement laid	116 square yards.		" " "116
Extra bínder		10½ tons.	$10^{1}_{2}$ tons.
8 Artificial stone sidewalks laid	12,735 square yards.	136,838 square yards.	149,573 square yards.
Brick sidewalks laid	7,253 " "	3,230 " "	10,483 " "
Crushed stone and cinder sidewalks laid	218 " "		n " 218
Steel reinforcement laid		156,725 pounds.	156,725 pounds.
Earth excavation		58,521 cubic yards.	58,521 cubie yards.
Filling furnished		6,022 " "	6,022 " "

5,061 tons. 164 cubic yards.	5,213 square yards.	934 " "	130 linear feet.	$17\frac{1}{2}$ square yards.	561 cubic yards.	,, ,, ,,	7,304 " "	21 " "	ж ж	95 linear feet.	3,120 "
5,061 tons. 164 cubic yards.	5,213 square yards.	934 " "	130 linear feet.	$17\frac{1}{2}$ square yards.	561 cubic yards.	92 " "	7,304 " "	21 " "	33 %	95 linear feet.	3,120 "
Crushed stone furnished	Old concrete base removed	Covers, catch-basins and Bradley heads	Wood fence	Brick block pavement removed	Walls removed.	Trees removed	Rock excavation	Catch-basins built	Dry wells.	Concrete walls.	Rubble walls.

# Explanations of Numerals on Preceding Pages.

l Concrete base laid six (b) inches thick.	250,376 square yards.	250,376 square yards.
ite blocks laid with gravel joints Total granite blocks laid with gravel	383 square yards.	383 square yards.
Recut granite block laid, grout joints, formerly macadam roadway Recut granite block laid, grout joints, formerly pitch joints. Recut granite block laid, grout joints, formerly grout joints. Recut granite block laid, grout joints, formerly gravel joints. Recut granite block laid, grout joints, formerly gravel joints. Total recut granite block laid, grout joints, formerly filling.	1,799 square yards. 6,839 u u u u u u u u u u u u u u u u u u u	57,526 square yards.
Second-hand granite block paving laid, grout joints, formerly gravel roadway  Second-hand granite block paving laid, grout joints, formerly gravel joints  Second-hand granite block paving laid, grout joints, formerly gravel joints.  Second-hand granite block paving laid, grout joints, formerly macadam roadway.  Total second-hand granite block paving laid with grout joints.	89 square yards. 8,716 " " " " 34,388 " " " " 43 " " "	43,236 square yards.
Sheet asphalt pavement laid, formerly macadam roadway. Sheet asphalt pavement laid, formerly gravel roadway. Sheet asphalt pavement laid, formerly gravint block paving. Sheet asphalt pavement laid, formerly brick block paving. Sheet asphalt pavement laid, formerly bitulithic pavement. Total sheet asphalt pavement laid,	39,063 square yards. 50,302 " " " " " " " " " " " " " " " " " " "	138,948 square yards.
Bitulithic pavement laid, formerly gravel roadway.  Bitulithic pavement laid, formerly macadam roadway.  Bitulithic pavement laid, formerly wood block pavement.  Bitulithic pavement laid, formerly granite block pavement.  Total bitulithic pavement laid.	38,886 square yards. 50,210 37,804 " "	131,902 square yards.
7 Concrete pavement laid, formerly gravel roadway.	9,815 square yards.	9,815 square yards.
8 Artificial stone sidewalks laid with foundation Artificial stone sidewalks laid on existing foundation. Total artificial stone sidewalks laid	44,818 square yards. 92,020	136,838 square yards.

Work Done by Paving Service Forces During 1927.

	Old.	New.	Total.	
Edgestone set.	29,053 linear feet.	8,359 linear feet.	37,412 linear feet.	
Concrete base laid	1,354 square yards.		1,354 square yards.	
Roadway, granite block, gravel joints	11,167 " "	13 square yards.	11,180 " "	
Roadway, granite block, grout joints	20,730 " "	40e " "	21,136 " "	
Gutter, granite block, gravel joints	10,864 " "	1,866 " "	12,730 " "	
Gutter, granite block, grout joints	3,398 " "	106 " "	3,504 " "	
Flagging crosswalk, gravel joints.	n n 082	34 " "	814 " "	
Roadway, wood block, sand joints	n n 868'L		n n 868'2	
Asphalt penetration macadam surface placed		149,814 square yards.	149,814 " "	
Macadam surface patched	398,747 square yards.		398,747 " "	
Asphalt blanket coat	68,815 " "		68,815 " "	
Macadam roadway sanded	1,200 " "		1,200 " "	
Sheet asphalt surface placed		1,943 square yards.	1,943 " "	
Sheet asphalt surface patched *	4,915 square yards.		4,915 " "	
Sheet asphalt surface patched †	9,928 " "		9,928 "	
Brick sidewalks laid	55,414 "	582 square yards.	25,996 " "	
Artificial stone sidewalks laid	7,437 " "	2,092 " "	9,529 " "	
Sidewalk excavating, no sidewalks laid		134 " "	134 " "	
Gravel or crushed stone sidewalks surfaced	200,837 square yards.		200,837 "	
Roadway excavating, no roadway constructed	567 cubic yards.		567 cubic yards.	
Roadway excavating, roadway changed	461 " "		461 " "	
Grading (no pavement laid)		1,133 square yards.	1,133 square yards.	
Brick block pavement laid	286 cubic yards.		, , , , , , , , , , , , , , , , , , , ,	
Concrete roadway laid.	1,465 " "	296 square yards.	1,761 " "	
New style sign posts erected		1,308	1,308	

[†] Patched with bituroc, kyrock, emulsified asphalt and stone, taric compound and stone, etc. * Patched with asphalt mixture from Brighton asphalt plant.

Objects of Expenditures from the Various Appropriations, Classified by Districts, from January 1, 1927, to December 31, 1927.

DISTRICTS.	Macadam Repairs.	Paved Street Repairs.	Removal of Snow.	Street Cleaning.	Edgestone and Sidewalk Repairs.	Street Work.	Schedule A, Miscellaneous.	Totals.
South Boston and Dorchester North	\$12,862 38	\$17,875 14	\$29,822 12	\$1,441 02	\$13,628 19	\$141,073 22		\$216,702 07
East Boston and Breed's Island	14,593 19	1,251 66	14,537 67	1,229 61	11,826 99	67,627 55		111.066 67
Charlestown	7,681 75	10,204 49	40,673 69	2,005 45	12,654 69	119,795 26	:	193,015 33
Brighton	36,598 63	210 33	20,882 54	29,038 27	13,326 15	134,491 25	:	234,547 17
West Roxbury	40,157 92	1,453 54	38,301 72	28,271 26	11,231 25	290,012 85		409,428 54
Dorehester	28,459 49	2,368 74	23,174 78	12,678 23	17,295 73	116,733 04	:	200,710 01
Roxbury South and Jamaica Plain	44,328 77	2,366 38	49,291 76	49,585 93	18,582 41	351,148 77	:	515,304 02
City Proper	32,213 03	26,605 65	214,796 24	787 03	51,331 37	551,178 88		876,912 20
Ashmont	23,630 66	1,440 47	21,351 18	14,381 60	7,402 40	214,496 16		282,702 47
Hyde Park	19,851 21	162 25	11,043 92	11,645 39	2,760 42	14,780 72		60,243 91
Miscellaneous						1 69,053 74 2\$527,257	:\$527,257 71	596,311 45
Totals.	\$260,377 03	\$63,938 65	\$463,875 62	\$151,063 79	\$160,039 60	\$2,070,391 44	\$527,257 71	\$3,696,943 84

¹ Includes, garage, Hancock street yard, \$529.35. Artificial stone sidewalks, repairs and rebates, \$14,028.82. Asphalt and bitulithic repairs, \$15,291.31. Recutting and redressing old granite blocks, \$3,262.35. Street signs, \$35,941.91.
² Includes artificial stone sidewalks, new and repairs, \$28,495.95. Asphalt and bitulithic repairs, \$32,885.57. Wood block repairs, \$16,121.79.

# SCHEDULE A.

# EXPENDITURES FOR FISCAL YEAR 1927.

Salary of division engineer (part of)	\$3,750 00
Salaries of office clerks and stenographers	13,993 96
Salaries of assistant engineers (office work)	20,269 32
	15,056 50
Salaries of permit office clerks Salaries of permit office inspectors	19,517 10
Salaries of engineering inspectors (office work)	18,362 52
	1,855 03
Salaries of district inspectors	400 00
Madical attendance on injured applicance (aut	400 00
Medical attendance on injured employees (out	401 00
side)	461 00
Salary of general foreman	3,054 96
Salary of chief veterinarian (part of)	$500 \ 00$
Salary of inspector of horses	1,603 29
Salary of constable and inspector	$2,239\ 15$
Pensions paid to veterans (retired)	4,893 64
Pensions paid to veterans (retired) Pensions paid to laborers (retired)	12,284 28
Compensation allowed injured employees	3,446 28
Vacations allowed laborers, mechanics, etc	38,429 31
Holidays not including holidays charged to street	00,120 01
accounts	88,169 49
Wilton duty	100 00
Military duty	100 00
Postage	130 00 207 33 2 050 22
Postage Printing Stationery Traveling expenses, car fares, etc. Engineering supplies and incidentals	2,959 22 507 65 1,237 81
Stationery	507 65
Traveling expenses, car fares, etc.	
Engineering supplies and incidentals	2,110 02
Stationery	
Postage 102 88	
Transit renairs 143 67	
Postage	
Laboratory, salaries, supplies, etc.	1,239 49
Artifical stone sidewalks, new and repairs by	1,200 40
deportment force (See reconstructing and	
department force. (See reconstructing and	00 405 05
repairing streets by contract)	28,495 95
Asphalt and bitulithic pavement repairs. Tem-	
porary repairs, labor, teaming, materials. (See	
reconstructing and repairing streets by contract),	32,885 57
Brick block repairs, labor, teaming, materials .	$488 \ 45$
Wood block repairs, labor, teaming, materials .	16,121 79
Crosswalks repaired, not included elsewhere	1,155 68
Fence repairs	* <del></del>
1	
Carried forward	\$340,603 88
Jan vow jor www w	#320,000 00

Brought forward	\$340,603	88
Plankwalk repairs	1,717	
Edgestone sidewalks and gutters (new) not	·	
included elsewhere	18,862	57
Rent of land, wharves, etc.	2,775	00
Expense of stables, including	-,	
drivers, feeders, fodder, horse-		
shoeing, repairs to harnesses.		
wagons, carts, etc. \$138.116.94		
shoeing, repairs to harnesses, wagons, carts, etc \$138,116 94 Amount earned by department		
teams 120,260 13		
	17,856	81
Electric lighting at yards and stables	1,327	
Gas lighting at yards and stables	321	
Fuel, for heating offices, buildings and stables	3,930	
Electric appliances, labor and materials, yards	5,550	20
and stables	149	83
and stables	178	
Storreg pines grates etc.	50	
Telephone rentals and tells	2,062	
Telephone rentals and tolls	186	60
Signs, making, repairing, putting up, etc.		
Signs, making, repairing, putting up, etc.	31,091	
Tools, hardware, etc., new, cost of repairing, etc.	39,671	
Oil for lighting around defects, etc.	1,585	10
Expenses of yards, including salaries of foreman,	CC 149	0.4
clerks, yardmen, watchman, tool wagons, etc.,	66,143	84
Repairs of yard buildings, stables, sheds, shanties,	1 = = 41	0.0
etc	15,741	
Sanding icy and slippery streets Chests for Central Office, making of	1,576	91
Chests for Central Office, making of	120	47
Premium on surety bonds	12	
Traverse Street subway	1,477	00
Premium on surety bonds Traverse Street subway Placing lanterns on silent policemen	4,433	00
Repairs to and inspection of typewriters and		
adding machines	62	
Repairs to snow dumps	1,070	10
Work done and materials turnished individuals.		
corporations, etc	5,617	
Furniture and repairs	12	
Miscellaneous	1,779	95
Miscellaneous Steam rollers; cost of operation, repairs, supplies, etc. Amount earned		
repairs, supplies, etc \$25,710 59		
Amount earned		
	$5,\!273$	84
Work done and materials furnished other services		
and departments	$6,\!276$	
Buffalo, Springfield steam roller	6,950	
Asphalt plant, South End District	8,571	90
Automobiles, one Walter truck	$9,\!450$	00
Carried forward	\$596,938	37

PUBLIC WORKS DEPARTMENT	Public	WORKS	DEPARTMENT	r
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Brought forward
supplies, etc
gasolene, supplies, repairs, etc
Garage, Hancock street, employees' wages, fuel gasolene, supplies, repairs, etc. 13,124 60
Total
Credits:     Amounts earned by concrete mixers, snow-loaders and tractors \$13,385 89     Automobiles:     Amount earned by trucks . \$160,216 13     Cost of operation, repairs, supplies, equipment
Total

Snow and Ice Removed by Contract from January 1, 1927, to December 31, 1927.

	Remarks.	1926 contract. 1927 contract.	1926 contract. 1927 contract.	1926 contract. 1927 contract.	1926 contract. 1927 contract.	1926 contract. 1927 contract.	1926 contract. 1927 contract.	1926 contract. 1927 contract.	1926 contract.	1926 contract. 1927 contract.	1926 contract. 1927 contract.	1926 contract. 1927 contract.	1926 contract. 1927 contract.	1926 contract. 1927 contract.
1 31, 1927.	Total Cost.	\$22,021 73	4,569 68	12,995 96	19,848 00	16,757 20	25,058 28	10,404 00	23,227 25	10,771 90	13,005 25		9,663 90	22,835 40
Decembe	Cost per Cubic Yard.	\$0 55 55	55	55	60 55	09	65 65	50 55	50	65 65	200	F. Acet. 58	60 54	09
, 1927, 10	Cubic Yards.	40,039½	8,3083	23,629	33,080	26,262	38,2431	20,808	46,4543	17,7863	26,0103		$16,106\frac{1}{2}$	38,059
January	Number of Loads,	4,405 No work.	801 No work.	2,535 No work,	3,348 No work.	3,073 No work.	4,476 No work.	2,548 No work.	5,284 No work.	2,360 No work.	2,887 No work.	No work. No work.	1,980 No work.	4,339
Snow and Ice Removed by Contract from Jahuary 1, 1921, to December 31, 1921.	Contractor.	Hugh Nawn, Inc. J. J. McCarthy & Co.	Leo J. Nawn, Inc. Leo J. Nawn, Inc.	B. E. Grant Company. B. E. Grant Company.	Coleman Brothers B. E. Grant Company	Ormac Company Ormac Company	A. G. Tomasello & Son A. G. Tomasello & Son	M. F. Gaddis J. J. Loonie.	J. J. McCue Company J. B. O'Rourke.	Coleman Brothers J. A. Singarella	J. J. McCarthy & Co D. M. Biggs & Co	D, M. Biggs & Co. E, J. Byrne.	James Byrne. A. DeStefano & Son, Inc.	Coleman Brothers
10	DISTRICT.	1	3	3	4	5	}9	}	}	}6	10	}	12	13

The Number of Loads of Snow Removed from January 1, 1927, to December 31, 1927.

District.	Single.*	Double.†	Auto Truck.‡	Cubic Yards.	Cost.§
South Boston	954	1,002	3,384	28,822	\$20,158 22
East Boston	5,102	2,703	167	19,315	14,537 63
Charlestown	2,706	683	782	12,153	17,838 29
Brighton			1,974	20,793	20,882 5
West Roxbury	588	1,677	3,724	29,199	38,301 7
Dorchester	1,194	265	3,178	22,251	23,174 7
Roxbury	1,946	612	1,119	17,461	49,291 7
South End	168		8,607	74,408	49,804 2
Ashmont	5,481	2,508	1,093	23,407	21,351 1
North End	287		1,531	12,648	2,826 6
Hyde Park	515	735	1,614	6,698	11,043 9
Totals	18,941	10,185	27,173	267,155	<b>\$</b> 269,210 8

* Single loads, 2 cubic yards.
† Double loads, 3 cubic yards.
‡ Auto truck loads, 3 cubic yards to 14 cubic yards.
§ Includes cost of plowing gutters, cleaning sidewalks and picking ice not carted away.
Also automobile snow plows furnished by contractors.

Loads of Dirt and Street Cleaning Removed from January 1, 1927, to December 31, 1927.

District.	Single.*	Double.†	Auto Truck. §	Cubic Yards.
			<u> </u>	<u> </u>
South Boston	52	151	868	5,562
East Boston	123	61	_	145
Charlestown	238	_		238
Brighton	38	3	4,007	24,086
West Roxbury	1,420	3,270	1,458	16,708
Dorchester	284	77	305	2,268
Roxbury	2,752	1,019	753	9,308
South End	_	_	16	96
Ashmont	1,639	545	351	4,835
North End	_	_	_	_
Hyde Park	1,461	224	56	2,245
Totals	8,007	5,350	7,814	65,593

* Single loads, 1 cubic yard. † Double loads, 2 cubic yards. § Auto truck loads, 6 cubic yards.

New Edgestone and Brick Sidewalk Recapitulation for 1927.

District.	Edgestone, Linear Feet.	Brick Sidewalk, Square Yards.
South Boston, Paving District, No. 1	556	
East Boston, Paving District, No. 2	468	28
Charlestown, Paving District, No. 3	80	_
Brighton, Paving District, No. 4	1,671	
West Roxbury, Paving District, No. 5.	1,303	
Dorchester, Paving District, No. 6	1,928	
Roxbury, Paving District, No. 7	1,331	554
South End, Paving District, No. 8	262	_
Ashmont, Paving District, No. 9	137	_
North End, Paving District, No. 10	_	_
Hyde Park, Paving District No. 11	623	-
Totals	8,359	582

# New Granolithic Sidewalks Laid by Department Forces During 1927.

District.	Square Feet.	Location of Work.
South Boston	_	
East Boston	_	
Charlestown	10,809	Chapman street, Beach street, Lawnwood
Brighton		place.
West Roxbury	837	St. Joseph street.
Dorchester	702	Melville avenue.
Roxbury	2,088	Sunnyside street, Tremont street.
South End	4,392	Massachusetts avenue, Tremont street.
Ashmont	_	
North End	_	
Hyde Park	-	
Total	18,828	

# PUBLIC WORKS DEPARTMENT—HIGHWAY DIVISION—PAVING SERVICE.

Maintenance of Macadam Streets.

Cost by Years of Resurfacing or Patching from February 1, 1923, to December 31, 1927.

	1923.	1924.	1925.	1926.	1927.
Total length of macadam in miles	351.25	347.63	343,50	340.24	335 69
Total area of macadam in square yards	5,926,385	5,789,425	5,708,269	5 690 035	20.000
Total cost of resurfacing of macadam *	\$57,883 32	\$40,032 79	\$111.541 74	\$100.946.93	9,509,517
Total cost of patching of macadam†	\$196,758 28	\$251,026 22	\$231,916 92	\$305.664 95	\$299 546 48
Cost of resurfacing per mile over entire mileage	\$164 79	\$115 16	\$324 72	\$294 64	\$356 94
Cost of resurfacing per square yard over entire area	2600 08	80 0069	\$0 0195	80 0178	\$0.0215
Length of macadam resurfaced yearly in miles	3.322	1.905	4.939	4.893	6.6506
Cost per mile of macadam resurfaced yearly	\$17,424 23	\$21,014 58	\$22.583 89	\$20.487 64	\$18 019 73
Area of macadam resurfaced yearly in square yards	47,870	27,461	82.648	67.419	89 560
Cost per square yard of macadam resurfaced yearly	\$1 2091	\$1.46	81 33	81 40	84 994
Area of macadam patched yearly in square yards	324.187	459 960	290 801	64 10	10010
Cost per square yard of macadam patched yearly	80 6069	80 ARR	100,020	450,702	479,544
		9	00 / 04	879 0%	\$0 625
	0000				
The manufacture of the second	0000.	0000	0000	0000.	0000
tax preparation	0000	0000	.0084	0000	0000
Asphalt preparations	1.0000	1.0000	9166.	1.0000	1.0000
			-	-	

* By resurfacing is meant entire area of street excavated and resurfaced with not less than four inches of new material.
† By patching is meant scattered areas of depressions, etc., which are filled with new material from a depth of one half inch up, and in some cases blanket coated with bituminous binder.
398,747 square yards patched; 80,797 square yards asphalt blanket coat.

### STREET OPENINGS.

Under classes 1 and 2 of the schedule of permit fees, permits were issued for openings in public ways, as follows:

To Whom Issued.	Number of Permits.	Length of Feet.
Sewer and Water Service Boston Consolidated Gas Company Boston Elevated Railway. Dedham and Hyde Park Gas Company Edison Electric Illuminating Company Miscellaneous New England Telephone and Telegraph Company Emergency permits used and returned.	4,132 1,778 190 74 3,996 3,063 745 642	49,584 44,450 28,500 1,850 279,720 153,150 55,875 16,050 629,179

Making a total length of openings approximately 119 miles.

Total of all permits issued 22,516.

Permits for other than street openings have been issued as follows:

Cleaning snow from roof.						15
Erecting and repairing awning						507
Erecting and repairing building						1,236
Driving cattle Painting or minor repairs on b	uilding			•	•	4,059
Moving buildings in streets						13
Feeding horses in streets.						25
Placing signs flat on buildings						1,229
Raising and lowering safes etc. Emergency for above	•			٠		33 490
Special permits			•			287
Politica		•	•	•	•	

7,896

The revenue from issuing permits amounted to \$26,997.33.

Of this amount \$20,753.08 was deposited with the City Collector and \$6,244.25 was billed to public service corporations.

Bonds.

There are now on file 2,724 surety bonds, in amount of one, three and twenty thousand dollars, covering the city against claims for damages etc., through the use of permits.

### HIGHWAY DIVISION - PAVING SERVICE - DETAIL OF WORK DONE BY CONTRACT AND CHARGED TO APPROPRIATION "GRANOLITHIC SIDEWALKS."

_			=			1		_			0																
_													MATER	ALS.				Е	XFENSES.				Work	DONE.			
	Street.	From		То	Contractor.	Pavement.	Length, Linear Feet.	Aren, Square Feet,	Total Coat.	Amount Paid to Contractor.	EDGESTONE,	GHANIT	E BLOCK	SIDEWALK BRICK	. MISCELI	LANEQUE	ecring.	etion.	oling, etc.	rtsang	Haneous.	Exenvation and Filling.	Brick Sidowalk Laid and Relaid	Roadway Paved and Repaved.	Artificial Stone Sidewalk Laid.	llaucous.	Рвобиелл.
											Cost. Quanti	ty. Cost.	Quantity.	Cost. Quants	ty. Cost.	Quantity.	Engi	Inspe	Trav	Adve	Misso C.	ubic Lines ards. Feet	Square Yards	Square Yards.	Square Feet.	Misce	
1 · 2 · 3 · 4 · 5 · 6 · 7 · 8	Academy Hill road. Addie street (south sode) Asbley street (south sode) Asbley street (south sode) Austin street (south sode) Beech Clen street Beech Clen street Blue Hill svenue Boylston street Brookline svenue	Washington street Frankin street. Chestout avenue Carruth atreet No. 57 Fort avenue At No. 458 and No. 460. On Boeton Common side Tremont A No. 61 and Newbury street.	No 46. Everett stre Armstrong: Adams stre Parrott stre Highland av Charles stre	street et . eet . vegue	Charles Struznery Henry F. Malley J. J. McCarthy Company Leo J. Nawn, Inc. John McCourt Company. Leo J. Nawn, Inc.		1,766		\$1,367 40 \$17 43 62 84 6,946 92 54 98 20 447 88 880 50 621 97	720 96 4,221 91 447 88	2,380 34 1,4	667		1314 70			\$224 52 86 84 60 06 213 30 53 00		87 60 80 1 70 5 55 90 20	\$2 00 . i 0s . 1 08		6 8	38	35	5,937 12,145 1,131 2,935 1,795		Completed August 17, 1927. Completed December 14, 1929 Work not completed Completed April 28, 1927. Work not started Completed 1927 Completed 1927 Completed 1927 Completed 1927
9	Carruth street Central avenue Chadwick street Chetauk fill avenue Chekatawabus street (south side) Correll street Corwin attreet Corwin attreet	corner Brookline avenue Ashmont street River street Ambrooe street Eulin terrace Neponset avenue Dickens street Washington afreet Areadus atreet	About 100 f Webster squ Yeoman str Court House Glide street Fenton stree Orange street Westville str	reet e driveway et et	J. J. McCarthy Company The Homes Company Joseph A. Sprissler Charles Struzziery  J. J. McCarthy Company John F. Shea & Co.		1,364	5,304	219 01 172 53 842 74 662 90 3,126 38 781 01 152 35 84 38 154 64	33 56	1,360 17 1,6 65S 88 5	36		*35 00			168 85 122 76 115 84 149 15 51 30	90 62	2 60 4 85 5 20 3 20	1 08 2 00 1 09	35 00	·	101	31	626 2,115 1,488 6,406		April 8, 1927 Work not done in Completed 1937 II Completed 1937 II Completed November 2, 1927 II Work not done Completed November 2, 1927 II Completed November 31, 1927 II Completed March 31, 1927 II
18 . 19 20 . 21 22 . 23 24 25 . 26 .	Cushing avenue DeWolf street Dillingham street. Eltington street Elton street Evan street Evan street Geneva avenue Geneva avenue Grances street	Dorchester avenue In front of Nos. 31, 33, 35 Harvard avenue In front of No. 336 Duncan street	Downer ave End of stree Greenwood Sagamore at Landen stree Clayton stree	et.	Gen F. Shen & C. Charles Strugglery Leo J. Nawn, Inc. S. J. Tomasello Henry F. Malley Heary F. Malley Charles Struggery Leo J. Nawn, Inc.		366 519 5 34	5,957 5,226 5,980	1,392 10 452 75 3,473 4x 10 00 248 61 3 19	726 22 912 42 430 45 1,906 91	479 96 8	79 51 \$334 50	11,150				18 75 53 48 22 00 65 02 10 00 12 00 2 10 240 45	60 39 17 26 58 67	4 05 2 00 10 12 20	1 09 1 00	° 5 50		30 -75 -47 -99	284	5.226 7,189		Completed November 22, 1927. Completed October 6, 1927. Completed 1927. Completed 1927. Completed May 18, 1927. Completed May 18, 1927. Completed November 23, 1926. Completed November 2, 1926. Completed November 2, 1927.
28 29 30 31 32 33 34	Homenway street .  Homen avenue Jerome street .  Kittredge street .  Louis Prang street .  Manaheld street .  Maple street .  Marcells street .  Mattakeenet street .	Alcott street	Roseeliff str Evans way Easton stree Pine street Highland str Edgewater I	et Drive	John F. Shea & Co. Martino DeMatteo. Henry F. Molley Chorles Struzaery John F. Shea & Co. Charles Struzaery		51 448 375 1,127 690	307 5,723 4,649 7,010 7,233	2,027 84 83 50 3,550 40 4,241 66	67 13 1,147 42 1,999 48 1,022 87 08 20 2,141 16 2,283 97	786 21 6	26 98 50 00		21 00			2 00 7 33 16 00 175 01 167 09 15 00 478 09 189 88	12 14 152 60 46 27 206 09 72 14	1 05 . 20 20 3 45 4 40 30 . 15 10 6 80	1 00		is til	29 20 87 46 13 24	33 9 323 5 280	1,600 307 5,723 4,872 7,010 8,817		Completed 1927  Work not done. Completed November 22, 1927. Work done in 1928. Completed April 27, 1927. Completed April 27, 1927. Completed August 20, 1927. Work done in 1028. Completed December 3, 1927. Completed November 3, 1927.
36 37 38 39 40 41 42 43	Mattaacent street. Nawbern street. Oak street (south ade) Park street Park street Park street Parkman street. Phigrim road. Phie street (northeast ade). Pratt street. Rill street.	Elm street Maple street Alpha road No. 331 Dorchester avenue Brookine avenue Hyde Park avenue Lioden street Hancock street.	John A And 160 feet wes 200 feet wes No. 339 (Do Adams street Minple street Ashford street Ware street	drew street sterly sterly corehester). et b. st	Leo J Nawn, Ioc.  Damel Coleman, Miller Contracting Company J. J. McCarthy Company  J. J. McCarthy Company		1,088	13,183	502 08 7 30 886 82 636 37 601 80 118 85 8 00 3,142 26 10 00	502 68 638 39 636 37 584 10	245 43 2	73					7 00 17 00 109 55 8 00 294 46 10 00	108 41	70 80 8 05	8 50			50	9	1,349 1,396 1,607		Completed 1927. Work done in 1926 Completed 1927. Work done in 1926 Work not completed. Work not completed. Completed November 12, 1927. Work done in 1928.
45 46 47 48 49 50 51 52 53	Robinson street Rockland street Rockland street Rosemore road St. John street Schuyler street Schuyler street Schuyler street Schuyler street Schuyler street Schuyler street Schumen street Schumen street Schumen street Summer street (north side)	Adams street In front of Nos. 80 and 82. St. John street Washington street Centre street At No. 15. At Nos 10, 12, 100	Draper street 180 feet nou Forest Hills Rockview st No 21 John A. Am Bridge ove	atherly street.  kirew street er New York, New	M. D. Russo. The Homes Company Henry F. Malley. S. J. Tomssello. Henry F. Mulley The Homes Company. John F. Shea & Co Charles Strussiery Joseph A. Singarella		1,459 1,114 233 1,312 374	17,537 10,713 1,604 8,949 4,402	3,313 25 452 63 425 31 4,401 61	121 57 312 66	10 00 1,242 29 9	84		437 50			15 00 161 90 129 52 43 44 404 16 275 34	54 31 93 83 29 33 157 82 75 88	1 00 2 10 14 95 4 40	1 09 2 00 7 75			82	5 61 15 246 5 21	864 17,540 9,849 1,143 1,604 10,071 4,402		Work done in 1926 Completed in 1927. Completed in 1927. Completed April 18, 1927. Completed April 20, 1927. Completed April 20, 1927. Completed September 20, 1927. Completed September 20, 1927. Completed August 1, 1927.
54 55 56 57 58 59 60 61	Summer street. Sunnet street. Talbot avenue (west sade) Thatcher street Tuttle street Tuttle street West Tremlett street West Tremlett street Williams street.	East Cottage street Hillside street 130 feet north of Brent street. Hyde Park avenue Savin Hill avenue Armandine street Washington street No. 72	Annabel etr Parker Hill 207 feet no Metropolits	Hartford Railrond. reet I svenue orth of Ashmont street an avenue rth (east side) utherly	John F. Shen & Co		076 1,155 276	5.510 10,739 1,906	610 29 2,728 07 7 28 400 35 1,399 27	650 83 354 09 2,389 58 375 84 547 12 1,187 87 483 62	10 00	37					178 23 13 10 166 14 3 00 13 41 124 30 124 30 66 70	129 07 155 51 9 61 47 95 47 95 18 22	3 10 6 10 5 75 3 20 40 7 50 7 50 4 50	1 09 1 08 1 09 2 00 2 00 1 08	37 00	6	82 . 07	. 14 . 156 	10,739 1,906 1,579 4,872 2,041		Unfinished. 5 Work done to 1926 5 Completed October 29, 1927 5 Work not started. 5 Completed September 23, 1927 5 Completed September 23, 1927 5 Completed September 19, 1927 66 Completed November 17, 1927 66



### HIGHWAY DIVISION - PAVING SERVICE - DETAIL OF WORK DONE BY CONTRACT AND CHARGED TO APPROPRIATION "HIGHWAYS, MAKING OF."

									1		Mar	ERIALS,				Expans	18.5			Wor	E DONE.			
Syeeet.	From	То	Contractor.	Pavement.	Length, Linear Feet,	Ares, Square Yards.	Total Cost.	Amount Paid to Contractor.	thos	STONE.	GRANITE BLOCK.	SIDEWALK	nnick.	MISCRLLANEOUS.	ertibg.	ling, etc.	tising.	llaneous.	Edgraton and	and Reset.  Brick Sidewalk Laid and Relaid.	Roadway Paved and Repaved.	Artificial Stone Sidowalk Laid.	llancous.	Progures,
									Cost.	Linear Feet.	Cost. Quantit	y. Cost.	Quantity.	Cost. Quantity.	Engin	Trave	Adver	Misos	Cubic Lin	near Square ret. Yazda.	Square Yards.	Square Feet.	Miscs	
1 Adamson street	Franklin street	Everett street	A. DeStefano & Son, Inc	Sheet asphalt	630	2,030	\$85 27 2,731 78	\$516 3	31,696 37	1,380		:::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::		\$85 27 397 11 \$10	3 18 36 0	\$12.75	:::::::	816	:::: :::::::			:	Work not done 1 Unfinished 2 Work not done 3
4 Antwerp street	Beech street. Lincoln street. Southerly from Areadia street	Holton street	M. F. Gaddis	Sheet asphalt	1,070	3,190	15,261 40	12,221 0	3,385 50	1,873	89 00			1 38 22		8 8	5 3 10	3 \$12 00	1,635	1,876	3,191		* 63 00	Work Bot done
5 Areadia terrare. 6. Ascot street 7. Barnes avenue.	Antwerp street	Litchfield street Wauselln street and Washburn ave.	M. F. Gaddis	Sheet asphalt	238	700	3,823 29 16 00	3,714 2	5 492 50	392					88 41 2 18 00	3 73 1 3	0 3 10		306	456	700	3,044		Completed August 31, 1927 6 Work not done. 7
8 . Baymater street . 9 Bennett street	Southeasterly from Waupello road . 353 feet west of Parsons street	Oakland street	A. DeStefano & Son. Inc.	Bitulithie Sheet apphalt	1.063	3,166	7 00 14.824 80	11.519 8	0 2,467 43	615					7 00 522 19 25	8 35 19 4	5 3 67		1.758	1,959	3,178	13,460		
0 Benson street 1 Bynast street	South Huntington avenue	Jamaicaway	A. DeStefane & Son, Inc. M. F. Gaddis, M. F. Gaddis	Sheet asphalt Sheet asphalt	1,063 248 716	728 3,011	3,451 65 14,012 32	2.771 4 12,292 7	6 1,096 73	417 937						0 74 0 57 19 8	5 3 10 1 4 91		257 943	1,265	3,022	3.170 10,584	******	Completed November 12, 1927
2 Caton street 3. Cawfield street	River street	Hollogsworth street Eastmap street					263 02 117 38								199 02	3 4	0							Work not done
4. Cisymoss read		Mostastery road Northerly line of Euston road					325 82 151 99		1					4 134 10	188 82	5 1	0					1,490		Work not done
5. Colberne road	Commonwealth avenue. At northerly corner of Lanark road Lowell street.	Nashua street					5 00 45 00							145 00	5 00		1							Work not done
8. Courtland road. 0. Crowell street.	Morton street	Harvard street	Charles Capone	Bitulithic Sheet asphalt	625	1.806	11.174 01	1,947 1 9,959 2	9 1.649 42	980					14 75 332 15 12	4 45 8 2 5 63 1 7	0 0 50		933	1,169	1,929	7,968		Work done in 1926
O . Cygnet street	Walnut avenue	Litchfield street	Charles Capone Charles Capono M. F. Guddis M. F. Gaddis	Sheet asphalt	625 257 629	763 1,718	3,639 23 11,285 18	2,917 5 8,873 7	9 572 44 0 1,633 74	453 1,301						4 45 8 2 5 63 1 7 7 84 16 3	6 3 10 6 4 92		918	508 1,199	5 1,723			Completed September 3, 1927
2. Dever street 3 Doneaster street	Bowdoin street.	215 feet northwesterly Metropolitan avenue. Fayston street Litchfield street	Charles Capone	Bitulithic			545 86 162 76	520 0	1						24 35	50	0							
Dunkeld street Duval street	Quincy street	Fayston street	C M. Callaban, Inc M. F Gaddis	Bitulithic	263	765 762	4,347 32 3,530 71	4.113 9	3 + 18 77 5 469 93	368					75 53 15 60 38 6	3 08 3 5	5 3 16	1 :::: .	132 286	478	3 811 762 3,336	3,404	18 00	Work not done.         22           Completed May 36, 1927.         24           Completed September 3, 1927.         25           Completed October 1, 1927.         26           Work not done.         27           Work not done.         27
6 Eldridge road	Hyde Park avenue	Patten street	J. J. McCarthy & Co	Bitulithio	262 966	3,159	18,135 66	15,557 7	5 469 93 0 2,089 53	1,637					311 33 15 205 27	8 58 14 9	8 3 62		1,278	1,666	3,336	13,976		Work not done
8 Fernald terrace	Northeast, southeast and then northeast,						38 27								33 27									MOSK HOS GOING
9 Ferndale street . Fernenden street.	Southern avenue	Norfolk street	Charles Capone	Shert saphalt	492 690	1,428	8,660 95	7,319 1	910 94	732					298 80 13 387 02 8	2 16 7 8 1 94 19 6	1 00 .	0 22 50	985 992	928	1,459 2,000 2,869	6,292 8,589		Completed October 14, 1927
31 Floyd street .	Lucerne street	Call-nder street	Charles Capone	Portland cement concrete	815	2,478	12,162 D4	11,530 8	0 303 82	152					138 62 17	1 30 17 8 1 17 8 9	8 25		986	820	1,243	16,357		Completed June 15, 1927 3 Completed August 20, 1927 3
12 · · · Forsdale road · · · · · · Gardner street · · · · · · · · · · · · · · · · · ·	Malvern street	Babcock atreet	A. DeStelano & Son, Inc.	Sheet ambalt	1,032	3,899		1,948 E		1.620					38 23	9 62 7 3	15		3,050					
15 Glenrose road. 16 Gordon street	Holborn street	Adams street	Warren Brothers Company Charles Capone Warren Brothers Company A. Desselano & Son, Inc. Benry F. Mailey Warren Brothers Company Samuel J. Tomaselo.	Shert saphalt.	528 775	1,918	9.507 64 16.140 87	7.168 6	9 1,609 14 6 1,576 56	1,164					516 51 19 646 25 18	9 80 10 2 2 60 17 1	3 25		863 2,127	1,007	1,918	8,345 9,998		Campleted May 31, 1927. 33 Completed May 31, 1927. 34 Cowpleted May 31, 1927. 34 Work done in 1925. 35
Grampian way	At the northerly corner of Savin	Buecomplater street	Samuel J. Tomaseuo.	Sheet asphalt		2,402	24 00	10,718 0	1.076 36	1,240					010 20									
38 Green atreet	Hill avenue. At the southeasterly corner of Centre street.			Street widened			293 55		. 83 19	36					5 00			174 75			39	9	*63 50	Work done in 1927 35
39 Greenfield road. 40 Greenmount street	Bidge road	The railroad		Bitulithic			335 76 4.435 50	2.883 8	5 1,093 02		0.00				328 16 245 69 19	7 95 5 7	3 25		422	888 1	0 763	2,998		Work not done. 3 Completed August 4, 1927. 46
11 Greylock road	Allston street	Glevrille avenue Theodore Parker road. 802 feet northwesterly	Warren Brothers Company Martino DeMatteo	Sheet saphalt	666	1,673	6,594 80	6,221 8	938 47	854	0 00	:::::::::::::::::::::::::::::::::::::::			241 67 12	8 35 2 4 2 55 10 5	5		321 757	720	1,680 1,190 2,940	3,151		Work hot done.  Completed August 4, 1927.  Completed Msy 18, 1927.  4  Completed September 28, 1927.
42 Hallord street. 43 Hillsdale street	Church street.	802 feet northwesterly	A. DeStefano & Son, Inc. Joseph A. Singarella Martino DeMatteo	Bitulithic	837 1,504	2,433 4,360	14.432 38	11,418 2 25,432 4	0 1.956 76	1,533				17 56	394 69 62	9 37 19 8 5 62 17 2	6 00 .		1,795 2,156	2.767	4,366	8,426 19,308		Completed August 31, 1927
Holingsworth street.	Oakland street	Randolph road	biartibo Debiatteo	Sheet asphalt	1,004	4,369	27 00	25,432 4	4,130 24	2,701					27 00		(J.:: )							Work not done
16 Lewiston street	Beech street	Aerosa Tiverton road	J. A. Siogarella.	Portland cement concrete	340	1,320	1,744 77	1,964 8	63 30	6		r \$63 78 .			202 76 45 77 14 00	4 52	~[::. :]		122		1			Work not done Completed March 31, 1927 4 Completed March 31, 1926 4 Completed December 3, 1926 4 Completed in 1927 5 Completed in 1927 5 Completed September 22, 1927 5 Unfinished 5
S Lucerne street	Woodrow avenue	Monon street 710 lect northwesterly	J. A. Singarella. C. M. Callahan, Inc.	Portland coment concrete Bitulithic			9,241 81	6,186 g	17					1364 84	54 34	11 11 1	50	1,123 00					* 324 00	Completed December 4, 1926
0 Melville awane 1 Midvale road .	Northwest corner of Dorehester ave Corey street	Maple atreet	J. J. McCarthy & Co	Widened	620	1,800	2,067 B0 11,338 38	9,498	1,551 10	1,218	128 00 2.0			9 00 00	196 17 6	1 43 7 1	3 62		1,101	1,213	1,91	7,778	* 110 50	Completed September 22, 1927 S Unfinished
8 Montealm avenue.	Babson street. Dustin street.	Maple street Noriolic Street Playground West of Etna street	Martino DeMatteo	Sheet asphalt	620 867 838 752	2,714	793 31 16.104 93	13,395	1,899 69	1.486					312 64 15 486 66 30 461 55 21	1 43 7 1 9 07 7 2 7 84 14 9 2 42 12 6	5 2 75		1,297	1,612	2,53	8 0,973 2 10,105		Completed July 6, 1927
54 · · · Murray Hill road. 55 · · · Newburg street · · · · · · · · · · · · · · · · · ·	Washington street. Beech street. Beech street.	Parkasy	M. F. Gaddia	Sheet naphalt	782	2,268	12,982 31 222 70	16,588 3	6 1,684 39	1,337					215 79 345 63	3 2								
57 Norwell street	1 Washington street	West Hoxbury Paskway	Charles Capone	Portland coment concrete	1,415	4,135 1,739	22,495 14	18,497 8	2,958 62	7	110 34				664 91 28	4 84 0 1 8 96 15 2	80 . 3 38		2.150	2,862	4,60	7,500 7,532		Work not done. Completed July 4, 1927. Completed October 5, 1927 Completed August 22, 1927.
58 Olimstead street	Greaton road	1,300 feet southerly Peter Parley rond Church street	Charles Capone A. DeStelano & Son, Inc. J. J. McCarthy & Co.	Bitulithic. Bitulithic. Bitulithic.	1,415 570 800	1,739 2,326	8,646 89 13,604 02	6,669 6 11,044	16 1,335 26 17 1,915 31 13 87 99	1.042						8 47 8 (			1,078	1,105	3,31			
61. Ransom road	Chestnut Hill avenue	Colborne road.	C. M. Callahan, Inc		1		1,282 92 274 34							4 135 09 1 5 29	133 95 495 26 22	2 15 15 2	30		922	014	1,55	1,501	18 00	Work not done. Completed June 9, 1927.
82 Regus rosd . 63 Rockdale etreet . 64 Roelindale svenue	Cinymoss road. Washington street Oakland street	Priscilla road. Colborne road. Alpas road. Bandolph road.	Henry F. Malley	Sheet asphalt	473		46 21	10,643 9		8 374		7 12 00		1 5 29	45.27	1 89 10 3				1,966	3,31			Work not done
65 Roston street	Clorus wateret	Greenwood etreet	Samuel J. Tomasello.	Shret nephalt	996	1	20,828 88 2 84	19,867 (		90					2.85	0 04 6 6	4 3 02			1,325	2,16			
66. Russett roud 67. St. Joseph street	Schirmer road. Woodman street. Florida street.	762 feet southeasterly Arborway. Adams street	J. J. McCarthy & Co.	Bitulithie	730		260 38	t	1,647 73	3 1,275					93H 25	0 21 13 4	20 3 85	**15 00 .	031	1 505				Work not done. Completed July 20, 1927
68 St. Marks road 69 Stellman road 70 Sullivan equare		884 feet southcasterly	Warren Brothers Company	Bituhthie Sheet asphalt	. 776 892	2,293 2,548		8,555 9 15,560 3	7 1,362 41 1 1,958 80	1 633 0 2,501				1 1 S 110	262 76 16 495 86	5 60 14 2	13 25	11821 88	2,304	1,529	2,200	8 11,451	\$ 598 50	Completed October 5, 1927
71 Sumper terrace	Combridge street and Rutherford avenue, junction of Alford street.						2,918 42									\$ 94 10 2		1,002 00	277	375	58	1 2,592		Completed August 4, 1927 7
72 - Thurston street	Summer street. Butler avenue. Multop svenue.	Bayawater street Capen street	A. DeStelano & Son, Inc.	Bitulithic	105		25 78	2,242 9		8 385					25 78	2.11				1,408	2,27	0.737		Work not done. Completed September 17, 1927.
73 . Truxton street. 74 . Verdun street 75 . Wade street .	Codman street	Carmith attent	M. F. Gaddie Henry F. Malley Samuel J. Tomasello Charles Capose Murtino De Matteo Samuel J. Tomasello Illurino De Matteo Murtino De Matteo	Sheet asphalt Sheet Asphalt Bitulithie	769	2,272 1,308	13,130 28 8,672 41	19,829 2 7,217	1,655 80 1,101 24	0 1,297 4 880	11 11111 11111				444 21 18 230 22 11	9 48 3 7	75		1,084 919	876	1,37	5 6,141	19 00	Work hot done. Completed September 17, 1927. 75 Completed June 13, 1927. 75 Work done in 1926. 75
76 Wald street . Walk Hill street	Commonwealth avenue	560 feet southwesterly	Charles Capone	Bituhthic			50 00 515 80	50 ( 490 (	00	10.00					21 35 529 51 51	5 47 10	30	11.	3.674	877	3,90	0 7,980		Work done in 1929
28 Walworth atrect	Fottler road. Brook street. Westminster avenue.	Wellington Hill fnotway. Washington street Walnut park	Martino DeMatteo	Sheet asphalt	700 1,896 343	3,902 7,434	23,375 61 48,494 2	21,646 ( 43,458 7	75 3,824 03	868 2 3,024		::		ALL DESCRIPTION	1.085 98 41	6 03 29	15	2.617 47	8,700	3,623	3,90	4 25,832	# 60H 50	Completed June 7, 1921 Completed August 26, 1927 Completed November 30, 1927 Work not done
70 . Wardman street 60 . West Milton street 81 Vestmore road.	. Readville street	Milson street		Sheet nephalt	343	1,003	5,019 6: 180 4:	1,790	8 00	9				1848 43	44 10 174 82	. 5	30				1 :			
01 . Vestmore road. 82 . Westover street . 83 Wilhston road.	Deering road	Hazletou street.	Samuel J. Tomasello Charles Capons Samuel J. Tomasello	Bitulithie	518	1,500	8,458 91	7,953	06 1,214 66 76 407 93	6 985 2 310		:::::::::::::::::::::::::::::::::::::::		11	162 80 15 135 97 10	3 12 3 4	45 1 00	. 1	712	905	1,59	1 9,957 0 958	1 1	Completed September 29, 1927. S Completed June 1, 1027. S Work not done. S
84 Willow street .	Corey road	Brookline line.  Dunbar avenue.  Lurerne street.		Sheet asphalt			203 3						:::::::::::::::::::::::::::::::::::::::	1111 11.			v0	1. 11.						Work not done S
80 Winston road 80 Wyola piace .	. Willowwood street	Acrosa Vaughan avenue.	Martino DeMatteo Joseph A. Singarella	Sheet saphalt	875 228	2,595 879	10,828 19 3,754 48	8,321 3,024	1,882 03 484 65	748					432 14 15 151 01 1	4 39 15 0 1 33 2 0	0		1,098	1,340	2,50	6 1.896		Unfinished . 8 Completed May 27, 1927 8
M W																1 1 1			000	010	1 12	1 1,000		

4 Stone, asnd, cement, lumber, etc. 8 Credit, edgestone. 9 Credit, blocks.

2 Labor. 2 Photography, 2 Trucks, teams, concrete mizer, eteam roller, 2 Crodit, bricks, old sidewalks. * Artificial stone sidewalks.

* Removing trees, etc.



### HIGHWAY DIVISION—PAVING SERVICE—DETAIL OF WORK DONE BY CONTRACT AND CHARGED TO APPROPRIATION "SPECIAL APPROPRIATIONS."

										1					Materi	ALS.				1	E	EPENSES.					Work	Done					
	Sympton.	From		To		Contractor.	Payement.	Longth, Linear Feet.	Ares, Square Yards.	Total Cost.	Amount Paid to Contractor,	EDGES:	FONE.	GRANITE	BLOCK.	SIOCWALK	DRICK.	MISCELS	ANEQUS.	dering.	ctson,	ling, etc.	Tesng.	Hancous,	Excavation and Filling.	Edgestone Set and Reset.	Brick Sidewalk Laid and Relaid.	Roadway Paved and Repaved.	Artificial Stone Sidewalk Laid.	llaurous.	Pr	Rognzse,	
							}_					Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Dagit	Inspe	Traw	Adve	Misce	Cubic Yatda.	Linear Feet.	Square Yards.	Square Yards.	Square Feet.	Miser			
1 .	Cambridge and Court streets									\$9,204 10		\$75 44		\$955 50	29,050	\$42 00	35,000	1 \$794 86		\$93 14				*\$4,718 16						*\$2,525 00			
2	Causeway, Lowell and Nashua streets,									87 98										87 95										l			1 1
3	Department equipment																													1			1 . 1
4 .	Dock square and Faneual Hall square improvement					City Building Wrecking Company Coleman Brothers Company	Removing buildings Recut grante blocks		6,300	47,051 18	\$1,728 75 34,474 21	970 84		4,782 78				1279 97		1,039 79	\$1,241 63	\$36 55		* 1,474 81	1,487	1,448	17	6,808	11,227	* 1,022 SO			
5	Garage, Hancock Street Yard					Joseph A. Singarella	Garage			529 35																				l ]			
6 .	Kneeland street improvement .					New England Building Wrecking Co City Building Wrecking Company American Building Wrecking Co M. F. Gaddis	:)	2,034	15,210	48,279 56	( 2.515 00	232 95		8,504 00	108,400	* 52 %0		1 50 81		841 81	788 56	19 00	<b>\$7</b> 75	*2,907 D									
7	Morton street improvement	Capterbury street	Morton ro	ad		. Joseph A. Singarella	Catch-basin and surface drain Rubble wall	3,441		22,201 31	19,394 23									1,953 39	782 45	81 96	9 25		34 469	254		42 550					
8	Oakland and Ashland streets					. William J. Barry		4,500	26,400	19,752 81	14,853 75									4,250 05	555 89	73 37	7 78		9,348		.						1 /
9	Rayer street							8,900	32,400	5,840 88	4,250 00									1,442 40	88 53	5 20	18 75							4.36 DO			1 11/
10	Street signs																	24,052 65		2,358 01	338 03	7 95		¢ 8,318 38						1,066 91			10.5
11 .	Tremont street improvement	Stuart street	Bridge ov Ratirond	er Bosto	m & Alban	у				8,453 08	2,431 73	7 17						148 66		353 30		60		* 363 55						*219.00			1

Sand, stone, cement, etc.
Labor: excavating, paving, grouting, etc.
Teams, trucks, concrete mixer, steam roller, etc.

41. Mack service wrecker, \$8,694.
2. Barber-Greene snow londers, \$16,238.
3. Mend-Morrison tractors, with Walsh plows, \$17,400.

* Credit, old sidewalk bricks.

* Photographs.

* Expert service, \$307.91; trucks, \$759.

### DETAIL OF WORK DONE BY HIGHWAY DIVISION—PAVING SERVICE FORCE—

													)151 A				- 021-				1511.	10101	1 1 2	114	G 515.	11110	110	10015
									Work	Done.															C	er of L	BOR.	
	Street.	From	То	oet.	MACADAM BESURFACED.	рарти.	NOADWAY PAVED AND REPAVED.	EDGESTONE GET AND RESET.	OUTIDES PAVED AND REPAVED.	BRICK SIDEWALKS LAID AND RILAID.	CHURRED STONE SIDEWALKS.	CROSSWALKS LAID AND RELAID.		MISCELLANEOUS.	ering.	ion,	one Excavation.	one Setting and Resetting.	am Excavation.	sm Spreading.	Excavation.	Paving and Repaving.	Roadway Excavation.	Paving and Repaving.	alk Excavation.	alka, Laying and Relaying.	sdewalk, Excavation,	fidewalk, Laying and Relaying.
				Total C	Square Yards.	In.	Square Yards.	Linear Feet.	Square Yards.	Square Yards.	Square Yards.	Square Yards.	Square Yards.	Square Yards.	Engine	Inspec	Edgest	Edgest	Macad	Macad	Gutter	Gutter	Paved	Block 1	Crossw	Crossw	Brick 8	Brick S
1	Aldie street	Franklin street	Everett street	665 62	2,688 460	5 4													\$235 31 157 00	79 50	8740 13							
3	Ashmont street	Adams street Adams street Gordon avenue	Carruth street Newhall street West street	3,246 11	1	3								2 6,400					390 02 793 26	343 35 412 51				:::::::				:::::::::::::::::::::::::::::::::::::::
6	Bennett street	65 feet west of Market street	335 feet west of Parsons at Talbot avenue	reet				1,272	291	894				* 3,111			\$461 16	\$595 37		31 41	173 96	\$382 38	\$20 00	\$41 22			\$110 00	\$724 95
8	Cambridge street	Boston & Albany Reilroad Bridge. Norfolk street.	Charles River	2,425, 30	2.062	4													1,136 11 396 44	468 85 301 74								
10	Chapman street. Chestnut street	Main street	Charles River Embankmer	4 9,296 16 4 1,243 89	976	4	3,619	1,662						s 1,079			465 19	455 48	109 00	238 50			31 00	3,384 49				
12	Church street Columbus avenue, Providence street and Arlington street.	Weld street	Around, Statler Hotel	2,467 36 11,414 68	2,500	4-5	3,591							* 400					76 14	342 28			2,234 83	2,722 93				
14 15	Corey street Dals street	Centre street	Weld street	349 06 2,896 51	2,650	4								² 0,500					69 82 359 50	28 04 351 62 562 06		54 00						:::::::::::::::::::::::::::::::::::::::
16 17	Devon street	Dudley street	Woodville street	4,423 26	2,181 4,111	5												12 00	770 48	675 60 1.070 34		54 00	15 00	18 00				
19	E street	Blue Bill avenue West First street West First street	West Broadway	2,288 5	5,4248 2,4421 2,721	3 23	17	95 95	503					10 10 }			15 00		267 50 715 00	95 68 816 60	22 50	7 50 87 00	3 00	3 00				
21	East Cortage street.	Dudley atreet Chelsea street	Railroad bridge Putnam street Green street	2,027 56	7,000 3,168	3													78 15 213 04	456 95	5							
23	Elm street. Eric street. Corner Freeport street and New Way.	Sedgwick street	Glenway street		3			210						* 3,800 n 633			190 60	152 00	152 29	280 34 101 68 44 64	65 86	71 00						
25	Gaston street	Warren street	Blue Hill avenue	2,042 1 1,378 7	1,060	4		210						26,0663	H		100 00	102 00	393 00 114 00	228 00 318 68		12 00						
27	Gordon street	Cambridge street. Bridge over Neponset river	Pomeroy street	789 N	1,000	13								- 0,000,					1,324 57	221 72								
29	Greenough avenue	Centre street Magnolia street	Elm street Lingard street	1,663 8	470 1,983 1,175	2-3 4													119 39 105 73	244 90 535 70	01	173 00	20 50	50 16				
31	Hamilton street	Barry etreet	Bowdoin street	3,498 10	2,839	4													742 89 120 50	456 38 742 50 975 98	81	62 00						
33	Hillside street	Parker street	Parket Bill avenue	11,861 4	6,811	6													2,926 72	975 98	33 44	45 00	144 72	8 50				
35	Hyde Park avenue Keswick street	Ashland street Beacon street	Metropolitan avenue Med6eld street	1,097 7	RI.									* 13,6931 * 630						43 00	;							
37 38	Kittredge street	Washington street	Roseolifi street	5,793 6 1,394 9 4,607 1	6,790 3 450	5 4		360									175 54	77 04	228 00 27 07	808 3 95 2	51							
40	Lawrence avenue	Blue Hill avenue Brookline avenue	Magnoha street												\$25 00				1,119 47	361 9								
41	Louis Prang street	Huntington avenue Centre street	Weld street	301 0	6 1,006									3 4,450						457 79 52 1	5	16 00						
43	Marginal street	Boston, Revere Beach and Lynn Railroad.	Jemmer street	2,027 0		3											26 00	10 80		560 2								
45	Marion street	Chelsea street. 50 feet north of bridge over New York, New Haven & Hartford Railroad.	About 350 feet southeaste		2 2,340	3 4													870 70 266 00	1,003 3: 151 0	Š							
46	Northern avenue	Bridge. Doreheater street	. Commonwealth avenue	1,544 0 2,172 0 919 9	1,658(	4	1,298	13	30	105									236 47	277 56 65 8	3 00	33 00	240 83	744 57				12 00
48	Park Lane street	Walnut avenue Washington street	. Telegraph street	919 8		5						1		* 12,000	J				162 16	2009	5							
50	Pond street. River street	Centre atreet	Jamaitaway	1,103 3 2,720 3		4-5							:::		11				138 23	5. 1	2							
52	River street Robert street	Gordon avenue	Readville street	\$12 2 5,851 4 5,620 0 0,070 2	5 7 4,835	41								2 <b>11,</b> 6668					747 33	534 3								11.11
54	Rossmore road	Forest Hills street	Washington street	5,620 0	5 4,401 8 2,278	6											1::::::		220 72 1,172 49	859 49	3		10 00					111 11
56	Saybrook street	Market street	Dustitistreet Washington street	2,849 n	2,745							1		2 a,055			1:::::::		602 99	79 93 243 66	3						1	1.111
68 59	Sedgwick street	John A. Andrew street	South street	2,849 6 3,830 2 507 6 4,823 8	8 2,745 0 3,214									3 3,058	]				341 59	363 31 71 01	3				1.1.			
60	Stanwood street	Blue Hill avenue. Jeffries street	Columbia road	4,823 8 4,163 4	9 4,405	5								* 3,000		1			485 50 769 51	928 X	23 60	30 00 25 50				1		
62	Sunderland street. Sunset street.	Hillside street	Parket Hill avenue	1,901 0	8 7048 11 783#	4													46 75 677 04		2	16 60						*** :
64 65	Sunnyside street	Dudley street		1,006 7	3 8.055	1		272						a 222				342 23	617 79									
66	West street	Hyde Park avenue	Bird atject. West Hoxbury line. Forest fills street.	720 5	2 3,376									± 7,112					381 99	36) 73								
68	Willowwood street West Third street	Woodrow svenue B street	Domas street	1,015 4 2,798 5	3 1,484 0 2,340	4													379 67 381 13	323 58 262 03		:::::::						

¹ Tractor.

² Blanket coated with asphalt (square yards).

³ Granolithic sidewalks (square yards).

⁴ Tar paper.

# RCE—CHARGED TO APPROPRIATION FOR MAINTENANCE—PAVING SERVICE.

											· · · · ·									Cost an	QUANTITY	F OF MAT	TERIALS.										
Sidewalk, Laying and Relaying.		Cleaning.	Roller Rolling.	Roller Picking.	-20	ithic Sidewalk, Excavating.	ithic Sidewalk, Laying,		Abeous.	BLC	ocke.	ъя	ICKS.	CEN	ENT.	1002	STONE.	FLAG	001NO.	OB,	AVEL.	LUM	uen.	5.4	.NO.	GRUSHE: ANO	D STONE. DUST.	DITUMI BIND	lnous er.			MISCELLANKO US.	Remanes.
Brick B		Street	Steam	Steam	Тевпії	Granol	Granol		Miscella	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity. (Barrels.)	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity. (Tons.)	Cost.	Quantity.	Cost.	Quantity. (Tons.)	Cost.	Quantity. (Tons.)	Cost.	Quantity. (Tons.)	Cost.	Quantity. (Tons.)	Quantity. (Tons.)	
	3 72 5 61	\$41 50 22 50 170 69	\$171 00 135 00 168 00 9 00 107 25 117 00 115 00 117 05 117 00 115	18 00 99 00 243 00 81 00 81 00 86 00 86 00 86 00 18 00	\$750 00 00 00 00 00 00 00 00 00 00 00 00 0	\$308 6.415 5:		*\$271 30	137 50	\$7 65 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1 60 0 1 1	4.525		4,000	1,342 48 55 55 55 76 55 65 65 65 65 65 65 65 65 65 65 65 65	6.52 iss					\$7 20 \$69 11 7 20 17 31 10 16	425 6	\$12.50		3147 59 364 49 364 49 37 32 32 34 73 32 32 32 32 32 32 32 32 32 32 32 32 32	139.35	1,512 34 877 61 1,390 88 2,262 37 852 86 642 66 726 42 1,309 48 1,309 49 190 22 470 66 501 00 405 12 942 55 1,102 13	787 502.7 42.6 165.6 566 700 545.6 445.5 545.6 51.015 338.0 338.0 338.0 338.0 338.0 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.5 33.	900 64 446 39 188 55 461 06 182 70 688 71 430 96 870 32 1,494 74 655 97 655 97 655 97 655 93 19 134 38 39 02 248 80 276 82	11.6 27 3.95 42.4 18.8 7.97 10.5 7.72 28.3 18.25 21.3 21.2 21.3 21.2 21.3 21.3 21.3 21.3	454.20	1.20	<u> </u>	Asphalt
and the latest terminal termin	0 00 5 00	15 00 45 00	117 00 300 00 108 00 315 00 22 77	144 00 225 00 226 00 315 00 9 00 144 00 18 00 342 00 288 00	30 0k 111 0c 200 0k 200 0k 340 0k 340 5c 50 0k 120 0k 120 0k 120 0k 120 0k 1254 0k 125	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	904.5	Ó	1200 04	6 24		4 20	350	63										215 47 7 36 14 43 44 2 38		884 44 314 14 463 44 848 85 2,118 76 2,373 96 2,422 85 163 11 884 86 1,550 11 136 46 30 38 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 3	8 1,090 2 1,252.7 7 71.8 4 58 718.97 8 812 8 12 8 20 7 70.65 3 64.75		22.6 44.84 50 35.79 8.05 29.75 30.6 7.9 42 33.57 6.29 8.9 24.44 15.175 38.012				Asphalt

9 Grouting.
30 Drivoway (block) repayed.
11 Asphalt paving (squara yards).
12 Cost of asphalt paving.

11 Cost of asphalt cement (3 tons).
12 Work done in 1826.
13 Cost of wood block paving.



### HIGHWAY DIVISION - PAVING SERVICE - DETAIL OF WORK DONE BY CONTRACT AND CHARGED TO APPROPRIATION "RECONSTRUCTING AND REPAIRING STREETS BY CONTRACT."

												Maren	ALB.			_		Expansi	:e.				WORK	Donz.			
STREET	From	То	Contractur.	Pavement	Length, Lipear Feet.	Aren, Square Yards.	Total Cost.	Amount Paid to Contractor.	EDOES	TONE.	GDANITE	BLOCK	SIDEWALK	BRICK.	MISCELLANEO	NUS .	cering	ling, etc.	and the same	X	lancous.	Excavation and Filhag Edgestone Set and	Reset Brick Side- walk Laid	Rondway	Repaved.	Mucellaneous	* Риосика.
								-	Cost	Quantity	Cost	Quantity.	Cont.	Duantity	Cost Qua	ntity	Engin	Trave	Advoca	yanka.		ubie Line ards Fee	ear Squ et. Yar	are Squ ds. Yar	are Squad	re Linear Foet.	
Artificial stone sadewalks Applialt street repairs	Rebutes and repairs		Central Construction Company				\$14,028 82 15,291 31	\$13,860 82 10,821 08							\$168 00	\$2,	975 79 \$2,35	30 530	05	8 00							Work done in 1927 Work done in 1927
	C	Dorchester avenue	Samuel J Tomasello	Reput granite blocks	4.122	16,512	63,192 68	01,017 86	\$652 61	437	\$1,860 00	31,000	8914 20		1,258 00 }	13	317 19 39:	42 54	55	7 25		120 #	.183	351 17	759 49.6	131	Completed October 21, 1927
	Congress street		M. F. Gaddis	Recut granite blocks	1		253 74	200.00		101		1,000			163 00 1		53 44		30					**	100		Work done in 1926
Adams street Alford street	Park street Main street	Malden Bridge	Walsh & Co	Recut granite blocks	1,229	6,004	20,400 38	15,833 76			3,308 70	56,795	312 00	26,000		:	302 73 50	49 16	20	7 50		17 5	,013	.063	970 8.4	175	Completed November 1, 1927
Arnold atrest	Washington street	Shawmut avenue	J. F. Kennedy Construction Company	Bitulithie			30										100		30			4 7				4 7	Work done in 1926
Ball street.	Washington street	Shawmut avenue	J. F. Kennedy Construction Company	Bitulithie			30	01.000							\$250 00 l				301	0.00		A 122 A 7			223	4   -	Work done in 1926
Beacon street.	Massachusetts avenue.	Raleigh street	A. DeSteiano & Son, Inc	Bitulithie	1,520	0,899	35,627 16	34,937 55	33 08						61 50			11 39 35		8 00		27	858	10	,299 5,3	/98 .	Completed September 21, 1927
	Quincy street	Washington street	A. DeStefano & Sons, Inc	Recut granite blocks	241	1.070	1,588 42 7,007 22	1,456 00 7,006 60									131 22	. 1	20			10000 000				40 1	Work done in 1926
Boston street	Bridge over New York, New Huven & Hartford Rudrond.	Edward Everett square	J. J. McCarthy & Co	Recut grante blocks	241	1,073	7,007 22	1,000 000									80 02		**			A 1 1 117		** ***	***	4	Work done in 1926.
			W. A Murtfeldt & Co					100 56									94 22	1	70				7.4		.073		Completed September 8, 1926
	Park square	Aerose Stuart street	J. C Coleman & Sons	Bitulithio		14.038	2,979 00 45,776 70	2,763 35					4161 00		4.4		789 70 39	60 25	70	4.40		410 4	.216			4.1 7	
	Fenway .	Ceinmbus avenue	Henry F. Malley	Bitulithie	3,260	14,03%	10,770 70	44,432 69	305 89	1.1			-101 001				6 00 39	60 25	70	9 12		910 9	,210	15	,018 41,	01	Completed November 9, 1927 Work done in 1926
Burke street	Tremont street	West First street	11.11		1	::: :: I	7 96			1				11 1 11 11		1000	7 36	1	60			400	1 1 1 1 1 1 1 1			A = 7	Work done in 1926
	Main street	Somerville line					433 57	21 200 00									121 41 .	12				4				A 7	Work not started
	Columbus avenue	Stuart street	W. A. Murtfeldt & Co. J. C. Coleman & Sons	Bitulithie	174	484	1,501 37	1,400 72									21 86 .	. 1	30		- 1				484		Completed September 10, 1927
	Park square	Aerona Stunrt street	W. A Murifeldt & Co	Bitulithie	788	5.178	13,280 92	201 06 12,554 93	}.								358 75 14	98 10	20						,518		Completed October 14, 1927
		72 feet northerly	J. C. Coleman & Sons.		1		168.78	( 12,009 90							1		168 68 .	- 1	10			4 7				4 7	Work done in 1926
Crawford street	Warren street	Walnut avenue	Warren Brothers Company	Bituhthie	3,576	10,732	35,615 50	34,939 02	64 08				7 903 00 .				757 70 73	45 24	28		1.1	65 /	1,484	35 11	,279 29,	561	Completed June 10, 1927
Cunard street	Cahot street		deal and a second of the control of the			44	15 00										15 00					4 /				A 7	Work done in 1926
Dartmouth street and Trinity place	Tremont street	Columbus avenue	Henry F. Mulley		1		935 77	935 77							- 1	- 11	7,00		30	** **	1.5	/ 11/17		4.0		4 7	Work done in 1927 Work done in 1926
	Harrison avenue	Blue Hill avenue	Samuel J. Tomasello.	Sheet asphalt	2,834	11,907	41,347 03	39,902 76	159 82	1. 1. 11	366 00		*586 60			1.11	029 43 53	97 26	40	15 25		122 /	1,371	41 8	,759 29,	445	Completed September 13, 1927
Eliot etreet and Park square	į į		W. A. Murtfeldt & Co				133 29	133 29								4 44 4	i					/			1,	J81	Work done in 1927 Work done in 1926
	Oliver street Orehardfield street	Broad street 190 north of Mill street	the state of the s				14 00					*** ** * *					50 30					/ 2 24 227					Work done in 1926
Freeport street Glenway street	Blue Hill avenue	Harvard street	1.1				283 88			1.1	111					- 111	276 88	7	00		11.1	40001007		1111	::: l .		Work done in 1927
Harrison avenue	East Lenox street	Warren street	B. E. Grant Company	Relaying granite blocke.	2,564	12,186	49,502 27	42,632 52	445 96		4,962 00		1381 50 .				849 16 91	93 40	20	1.   1.		5,303		293 1	,397 36,	385	Completed July 6, 1927
	Commonwealth avenue	Brookhae line	the state of the state of the		1		28 00 93 59			4.0		400					28 00	4 1				1				4 7	Work done in 1926 Work done in 1926
	Federal street Forsythway	Broad street	J. F Kennedy Construction Company				9,217 06	9,096 82		3						1.0	120 24	11	.1		1 1	4.00	1.1				Work done in 1926
Kendall street .	Shawmut avenue	Tremont street	J. F. Kennedy Construction Company	Bitubthie		1 14	58 30			1, 1			1				58 00		30			4.1 . 11.7				A 7	Work done in 1926
	Mendian street	Shelby street	A. DeStefano & Son, Inc.	Recut granite blocks	3,470	11.603	39,430 96	33,388 06	354 25		4,404 24	!!	30 00				703 86 95	00 33	80	3 75		4 1	3,375	539 1	,696 50,	631	Completed November 7, 1927
		Riversay		Bituhthic	812		4.820 14	4,435 98				- 4	30 00[)									40	1,191		.166	165	Un6nished.
Marginal street	Near Jeffries atreet		Henry F. Malley. Edward J. MeHugh & Son.				3,788 47	3,581 07			17 10				190 30 1,0	020 84			100			1.625	i. 1		532	# 23	33. Work done in 1927
Medford street	Chelren street .	Mun street	A. DeStefano & Sons, Inc	Concrete and recut granite	5,584	26,862	85,719 37	81,741 70	667 89				84 00		11 93 00	L	472 54 1,53	39 120	85			284 10	0,723	1.108 2	.173 44,	498	Completed July 16, 1927
Microdian street	Lexington street	Meridian Street Bridge	A. DeStefano & Sons, Inc	blocks Bitulithic			6.936 34	6,863 68									72 66										Work done in 1926 .
Norfolk avenue	Lexington street	Meridian Street Bridge	the state of the s				8 00					1111	. 1	11			8 00					4					Work not done
Park square	Boylston street	Columbus avenue	J. C Coleman & Sons Company	Bitulithic	510	6,774	17,952 70 3,728 58	16,712 17		100			is 60 20 .				852 00 29	90 18	20	10 63 \$1	22 00	1000	192 .		,163 4,	00	Completed October 3, 1927 Work done in 1926
		High street Columbia read	Samuel J. Tomasello	Recut gramte blocks Sheet asphult	2,736	11.911	3,728 5S 44,446 86	3,878 36 43,209 72	534 18				ii 539 00		9 00	2.11	50 22 · 735 89 · 46	92 22	40	7 75		527	5,744	29 1	922 34.	866	Completed September 27, 1927.
Recutting, reheading, redressing old granite			William Toon.		2,100		3,263 35	3,262 35														1				A 1	Work done in 1926
blocks Samfield street	Tremont street	Grinnell street					74.00										14 00										Work done in 1926
Nawyar street.	Shawnut avenue	Lenox street	J. F. Kennedy Construction Company	Bitulithie	100 100		42 60			111111111111111111111111111111111111111							42 00		60			4					Work done in 1926.
Sparhawk street			La contraction of the contraction of the				161 46										158 26	3	20	44.0		1			18 4	038	Wark not done
Stuart street	Broadway	Columbus avenue	W. A. Murtfeldt & Co. J. C. Coleman & Som Company	Bitulithic	644	3,385	12,128 84	364 32 11,073 29									355 52 27	48 13	65		55 58	5	246 .	3	385	856	Completed September 24, 1927
Tremont street .	Washington street	Newton line	o. c. coleman & com company				25 00	1 11/010 29									25 00 .	100									Work done in 1926
Walpole street	Tremont street	Columbus avenue .					14 00										14 00	an in	0:			1 11	420	94	.808 9,	Š07	Work done in 1926 Completed April 2, 1927
Warren street Washington street	Dale street Massachusetts avenue	Aerose Quipry etrect Williams street	A DeSteiano & Son, Inc R E. Grant Company	Granite block Recut granite block	1,597	8,380	17,760 57 2,882 94	13,992 72 2,471 80		100	3,286 20	59,075					263 12 20.	28 10	25	1	1.0	4111	920	01	your V,	/"	Work done in 1926
	North Harvard street.	Market street															81 22	1. 0	00								Work done in 1926

New artificial atone sidewalks constructed.
Labor culling blocks.
Credit, old bricks.
Credit, old bricks.
Credit, old blocks.

Credit, old brieks
Credit, old brieks.
Credit, old brieks.
Credit, old brieks.
Credit, old brieks.
Credit, briek old sidewalk

11 Laber and photographs.
12 Credit, brick old, satewalk
13 Credit, bricks old, sidewalk.
14 Linear feet of fence.
14 Linear feet of fence.
15 Labor, teams, trucks, etc.



### HIGHWAY DIVISION-PAVING SERVICE-DETAIL OF WORK DONE BY CONTRACT AND CHARGED TO APPROPRIATION "PERMANENT STREET PAVEMENT."

-	,												MATE	RIALS.					E	XFENSES.		T		Work Do	NE.			
	STAKET.	From	То	Contractor.	Pavement.	Length, Lanear Feet.	Area, Square Yards.	Total Cost.	Amount Paid to Contractor,	EDGES	FONF.	GRANITE	BLOCK.	BIDEWALK	pnick.	MISCELLAN	Enve.	ceting,	ction,	ling, etc.	theing.	Bancous.	and Filling.	Reset.  Brick Side- walk Laid and Relaid.	Readwny Paved and Repaved.	Artificial Stone Side- walk Laid.	Ilaneous.	Progress.
										Cost.	Quantity.	Cost.	Quantity.	Cost,	Quantity.	Cost. Q	unntity.	Engin	Inspe	Trave	Adver			et. Square Yards.	Square Yarde.	Square Feet.	Misce	
1 :: 2 ::	Ainsworth street	Contrestrest.	South street. Fronklin street.		Repairing artificial stone walks.		1,280	\$1,406 94 30 00		В								\$50 76 30 00	\$34 00	\$2.50	\$13.00	.:		1,240	42	1 4,987		Completed October 8, 1927
3 4	Ardele street	South street. At junction with Commonwealth	Centre street	J. J. McCarthy & Co John McCourt Company	Repairing artificial stone walks. Bitulithic	1,598	2,236	3,320 47 754 19					::::::::	:::::::	::::::	:: :: :: "		96 33	73 26	4 40	::-::-   .:			2,113	. 85 25	δ		Company. Completed November 2, 1927 Work done in 1927
5667889 1101121221314 1151718 119202122022323	Boylute street.  Boyliton street.  British feares.  British feares.  Committed.  Danden street.  Edit feares.  Edit feares.  Edit feares.  Edit feares.  Feares and West Brockline streets.  Edit feares and West Brockline streets.  Edit feares and West Brockline streets.	a venue Tremon sirret Charles street Charles street Charles street Charles street Charles street Dartmouth street Washington street Washington street Washington street Washington street Courts street Washington street Streen little Free little Fr	Enter street Acress Clastics street. Achington street. Achington street. Sorthampton street. Differ lead of Booling square. Farrogar Tool Alloway street. Pond street. Country. Montation review. Old Colony Parks ay. Saver street. Last Nowton stree	John McCart Company, John McCart Company, John McCart Company, Sangal J. Tomasello, Sangal J. Tomasello, J. Market McCart Company, Saries Dallatteo, Joseph A. Singarella J. J. McCarthy & Co. J. J. McCarthy & Co. Sangal J. Tomarello M. F. Gaddie J. J. McCarthy & Co. J. McCarthy & A. Singarella J. J. McCarthy & Co. J. J. McCarthy	Intuitible  Intuit	1,872 800 906 122 2,923 402 855 2,733 5,046 1,777 1,622 1,508 2,561 3,354 411 3,55 1,123	0 4,881 3,639 3 403 18,509 11,161 2,285 15,600 10,007 4,640 374 773 9,580 9,800 1,041 1,252 1,252 1,252 1,253	41,502 80 19,170 57 11,345 70 10,345 70 1,023 28 60,171 23 2,379 53 6,405 40 30,319 57 10,365 08 24 00 2,017 11 38,286 24 28,550 02 3,120 03 4,331 75	41,011 56 18,641 05 11,346 70 11,346 70 10,00 30 58,802 83 5,072 53 49,850 43 29,926 16 26,034 45 20,302 76 2,041 60 4,331 75 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17 10,928 17	91 21 5		\$24 00 7,900 50 1,834 50	205,350	\$72.00 1840.00 1633.50 31.29 483.60	}	1 \$019 50 209 00 1 13 00 1 5 100 1 107 10 1 3 00		403 51 1,269 56 45 74 250 82 646 08 000 60 255 38 25 71 24 00 260 01 1,075 13 1,057 69 73 90	18 46 485 92 34 46 71 62 462 75 200 32 203 86 44 92 120 88 376 44 400 18 45 51	23 75 75 32 56 1 30 7 60 21 70 22 95 10 05 1 40 5 30 36 75 29 80	10 00 4 88 2 83 7 50 0 75 2 83 40 75 0 00 8 50 4 87 8 80		19 489 161	1,846 10 163 1,18 3,915 1,6 6,423 6 5,096 6 281 1,608 3,3201 1,14 3,403 2 5,63 55 2,576 5	is 18,44 1,16 2,36 16,00 is 10,06 4,62 10	99		Completed October 2: 1007 Completed October 27: 1027 Completed October 13: 1027 Completed Newarber 14: 1027 Completed Newarber 14: 1027 Completed Newarber 28: 1027 Completed Newarber 29: 1027 Completed Newarber 29: 1027 Completed Newarber 29: 1027 Completed Newarber 29: 1027 Completed October 27: 1027 Completed Newarber 21: 1027 Completed N
24 25 26 27 28 29 30 31 32 33 34	Fligrim read.  Gunny street.  Sar-logs street.  Sar-logs street.  Sar-logs street.  Stoughno street.  Tyuddi street.  Washington street.  Washington street.  Washington street.  Washington street.	Brookline avenue. Columbia road. Dorbestor avenue. Preseoti street Waltor street. Columbia road. Huntington avenue Walworin street. Dover attest. Do test north of Brattle street.	Short street Harry street. Roston street. Westerly. Westerly. Selwyn street. Pleasant street. Dartmoutb street. Ouermoy street Manachusetts avenue. 30 feet south of Cornhill.	Joseph A. Singarella. M. F. Gaddis M. F. Gaddis M. F. Gaddis M. F. Gaddis J. J. McCarthy & Co. J. J. McCarthy & Co. C. M. Cellahan, Incorporated J. J. McCarthy & Co. J. C. Coleman & Sons Company Samuel J. Tomasello	Sheet asphalt. Sheet asphalt. Sheet asphalt. Repairing orthicial atono walks. Repairing artificial atono walks. Bitulithis. Benaurog artificial atono walks.	836 211 1,186 703 606 1,917 3,944 347	2,616 537 0 6,000 6,380 2,797 17,726	16 09 9,614 18 1,170 25 21 90 1,743 80 1,841 51 53 80 11,827 27 4,818 19 72,410 83	8,013 11 1,072 02 1,646 85 1,620 50 11,450 85 4,311 95 50,616 52	5 109 44 6 109 44 3 14 72 7 174 12 2 313 59		1,149 00				\$ 77 11 \$ 125 25 \$ 212 83		16 00 387 60 71 86 21 00 05 11 65 11 49 00 150 39 156 07 1,002 33 3 00	194 65 21 18 39 04 44 25 117 32 169 98 1,299 74 49 15		8 75 2 84 8 00 8 00 8 75			1,336 1,354 1,275 400 2,890 5,984	2,76 50 43 2,76 1,03 26,21 1,44	5,992 6,383 7 6,006 4 17,726		Work not started. Completed November 28, 1027. Completed November 30, 1027. Completed November 5, 1027. Completed November 1, 1927. Completed November 1, 1927. Work not done. Completed September 7, 1927. Unfinished. Completed November 10, 1027. Completed November 10, 1027.

² Credit, bricks, old sidewalks. ³ Credit, blocks. * Labor, handling stock. * Labor. * Lebor and photographs.
* Credit, bricks, old.



## APPENDIX D.

# REPORT OF THE DIVISION ENGINEER OF THE SANITARY DIVISION.

Boston, January 1, 1928.

Mr. James H. Sullivan,

Commissioner of Public Works:

Dear Sir,— I submit herewith a statement of the activities and expenditures of the Sanitary Division for the year ending December 31, 1927.

The maintenance expenditures of the Sanitary Divi-

sion follow:

### SANITARY SERVICE.

This service during the year has shown a marked improvement in the various districts. All complaints have been promptly investigated and the results are fairly shown in the small number of complaints as compared with the number received in previous years.

While the problem of the shortage of available dumping facilities within economic haul is growing more acute each year, and the suburban districts are growing at an amazing rate, we have been able to show a marked

improvement in the collections.

One of the problems that we have had to contend with is that of having the householder provide proper receptacles. This has been a great handicap in the proper collection of both ashes and garbage and a matter that will have to be adjusted in the near future.

# STREET CLEANING SERVICE.

The purchase of the new motor-driven pick-up sweepers added to the equipment for street cleaning has made it possible to cover a much larger area in the suburban districts. However, the parking of the automobiles next to the curb still adds to the difficulty in cleaning the streets, and between the parking and the traffic interruptions the situation at the present time presents

a serious problem.

During the last two years another problem has presented itself, that of taking care of the old abandoned automobile chassis left on public streets and in public alleys. These bodies become very unsightly and have to be removed, adding another problem to the work of this department.

Yours respectfully,

E. F. Murphy, Division Engineer.

# SANITARY SERVICE.

<del></del>	
FINANCIAL STATEMENT.	
Appropriation	43 09
Expended by Sanitary Service, \$2,089,907 75 Expended by Street Cleaning and	52
Oiling Service	52
Income.	
Statement showing the amount of bills and ca deposited with the City Collector from February 1927, to December 31, 1927, and credited to Gene. Revenue.	1.
Tickets and bills for the removal of ashes and	0.5
waste	
Sale of manure	70
Rents	75
Sale of old material	00
Damage to wagon	20
Penalty on coal	98
Total	79
AMOUNT PAID INTO THE CITY TREASURY DURING THE YEAR	IR.
Removal of ashes and waste \$95,182	95
Sale of manure	78
Rents	75
Rents	39
Total	87
Total Cost of House Dirt, Waste, Rubbish and Offal, 1927.	
Salaries, division engineer, supervisor, chief	
veterinary and medical inspector \$6.651	35
Office supplies and expenses 4,060	13
Carried forward	48

Brought forward .						\$10,711	
Ashes, waste and rubbish a	ccou	$\inf$				1,348,583	50
House offal account .						621,733	15
Retired veterans' pensions	•	·	\$1,9			0=1,100	10
		•					
Retired laborers' pensions			4,8	928	UU		
						6,914	76
Total						\$1,987,942	89
Construction Repairs A Account.	.ND	Ho	RSESH	(OE	NG		
Expended for labor .			\$97,1	129	92		
Expended for stock .			32,3				
Expended for stook .	•	•			_	129,512	79
						\$2,117,455	68
Work Done for Oth	HER	SEF	VICES	S			
Street Cleaning Service						27,547	93
Total						\$2,089,907	<b>7</b> 5

# Items of Expenditure for the Year 1927.

Salary, division engineer (in part)	\$2,500 00
Salary, supervisor (in part)	1,750 00
Salary, medical inspector (in part)	1,158 35
Salary, chief veterinary (in part)	1,250 00
Salary, foremen	19,751 29
Salaries, yard clerks.	2,797 14
Salaries, yard clerks Labor, collecting and disposing of house dirt and ashes	704,620 14
Labor, collecting and disposing of waste and rubbish	38,612 33
Labor, collecting and disposing of house offal	358,230 72
Labor and stock at stables and vards	103,748 02
Hired teams on ashes	26,102 40
Hired teams on ashes.  Contractor on ashes, East Boston, Brighton, West Roxbury, Dorchester	,
and Hyde Park.	280,623 36
and Hyde Park	,
and Hyde Park	130,200 00
Holidays, pay allowed	117,872 16
Vacations, pay allowed	29,027 10
Grain.	15,221 07
Hay and straw	19,411 14
Hay and straw.  Medical attendance and pay allowed injured employees	9,903 84
Veterinary services and medicine	321 39
Horses, draught	1,050 00
Horses, draught	16,575 89
Labor, stock and wheelwright, blacksmith, painting, etc.	108,914 26
Labor, stock and wheelwright, blacksmith, painting, etc	33,678 38
Fuel	2,769 54
Gas	
Electric light and power	
Printing, stationery, office supplies, advertising	4,060 13
Automobile expenses	46,565 70
Rent	1,980 00
Tolls and fares	45 20
Telephone tolls and rentals.	823 94
Retired veterans' pensions.	1,986 76
Retired laborers' pensions.	
Total	\$2,089,907 75
	, , , , , , , , , , , , , , , , , , , ,

Amount Expended for the Collection and Disposal of Ashes, Garbage, Waste and Rubbish, by Districts, 1927.

	Domyle	ASHES.	.88	GARBAGE,	AGE.	Waste and Rubbish	В В В В В В В В В В В В В В В В В В В		Total Cost
Districts.	tion.	Cost.	Per Capita.	Cost.	Per Capita.	Cost.	Per Capita.	Total Cost.	Per Capita.
1. South Boston	73,162	\$86,599 13	\$1.1383	\$36,372 72	\$0.4971	\$225 00	\$0.0031	\$123,196 85	\$1.6839
East Boston	67,612	44,392 89	0.6565	12,369 96	0.1829			56,762 85	0.8395
Charlestown	39,047	55,623 79	1.4245	10,573 04	0.2709			66,196 83	1.6953
Brighton	49,694	53,476 60	1.0761	27,996 61	0.5634			81,473 21	1.6394
West Roxbury	61,170	60,064 34	6666.0	35,563 23	0.5811			95,627 57	1.5633
Dorchester	162,540	167,371 78	1.0297	92,682 29	0.5702			260,054 07	1.5999
7. Roxbury	129,275	186,165 48	1.4401	96,272 94	0.7447	11,922 29	0.0929	294,360 71	2.2770
S and 9. South End and Back Bay	118,216	274,674 58	2.3235	89,991 84	0.7612	38,561 11	0.3262	403,227 53	3.4109
10. North and West Ends	75,029	149,911 70	1.9981	33,308 60	0.4439	12,512 46	0.1667	195,732 76	2.6087
Hyde Park	20,407	11,996 69	0.5877	5,260 26	0.2577			17,256 95	0.8456
Disposal station		181,526 15		181,341 66		5,711 40		368,579 21	
Totals.		796,152 \$1,271,803 13		\$621,733 15		\$68,932.26		\$1,962,468 54	

### House Dirt and Ashes Removed.

Years.	Loads.	Cubic Yards,	Tons.
1923 *	280,448	1,065,625	434,234
	276,818	1,099,636	448,094
	239,840	984,287	401,087
	232,670	1,035,160	421,828
	182,658	1,140,579	464,787

### House Offal Removed.

Years.	Loads.	Cubic. Yards,	Tons.
1923 *	50,115	127,052	74,962
	50,584	142,822	84,264
	46,093	137,597	81,176
	48,738	161,551	95,315
	46,002	183,110	108,034

### Waste and Rubbish Removed.

	Lo	ADS.	Cubic	
Years.	Paper Carts.	Market Wagon.	Yards.	Tons.
1923 *	1,924 1,901 1,772 1,783 1,722	4,589 4,601 4,192 4,438 4,068	53,409 53,443 47,712 49,768 46,320	6,394 6,390 5,851 6,131 5,681

### Loads of Material Collected.

YEARS.	Ashes.	Offal.	Rubbish.	Total Loads.	Tons.
1923 * 1924 * 1925 † 1926	280,448	50,115	6,513	337,076	515,590
	276,818	50,584	6,502	333,904	538,748
	239,840	46,093	5,964	291,897	488,114
	232,670	48,738	6,221	287,629	523,274
	182,658	46,002	5,790	234,450	578,502

^{*} During the years 1923 and 1924 the financial year was from February 1 to January 31 of next year. † 11 months.

Collected by Contract.

		ASE	ASHES.				OFFAL.		
DISTRICTS.	Double Loads.	Auto Loads.	Cubic Yards.	Tons.	Single Loads.	Double Loads.	Auto Loads.	Cubic Yards.	Tons.
East Boston.	8,340	2,256	64,060	26,104		1,129		3,952	2,332
Brighton		6,132	61,320	24,988		3,991		22,354	13,189
West Boxhurv		5,698	56,980	23,219	:		1,310	13,100	7,729
Dorchester	24,786		224,620	91,533	1,164	6,214	35	24,427	14,412
Hyde Park	3,698	62	19,280	7,857		826		2,478	1,462
Totals	36,824	24,214	426,260	173,701	1,164	12,160	1,345	66,311	39,124

### Summary.

Material.	Cubic Yards.	Tons.
Ashes	426,260	173,701
Offal	66,311	39,124

Final Disposition of All Material in Loads and Tons (2,000 Pounds). Collected by the Sanitary Service, January 1, 1927, to December 31, 1927.

Class of Refuse.		Disposal	DISPOSE	TED AND ED OF BY ACTORS.	Total Loads.	Total Tons.
	Loads.	Tons.	Loads.	Tons.		
House dirt and ashes	145,834	291,086	36,824	173,701	182,658	464,787
Offal	41,255	83,322	4,747	24,712	46,002	108,034
Waste and rubbish	5,790	5,681			5,790	5,681
Totals	192,879	380,089	41,571	198,413	234,450	578,502

Cost of Collections and Disposal of Refuse by Contract in the City of Boston for the Year 1927.

Av. \$1.996 2.1228 2.1228 3.1.366 3.1.3756 3.1.3756 3.1.3756 3.1.3756 3.1.367 3.1.3756 3.1.367 3.1.367 3.1.367 3.1.367 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678 3.1.3678
\$53,476 60 \$7,996 61 \$31,756 12 \$31,756 12 \$18,929 06 \$177,371 78
\$53,476 60 27,996 61 \$31,756 12 18,929 06 \$177,371 78
\$31,756 12 18,929 06 \$177,371 78
\$31,756 12 18,929 06 \$177,371 78
\$31,756 12 18,929 06
18,929 06
. 9378 \$177,371 78
7.4717 107,682 29 985,054,07
Av. \$2.6914
\$1.5268 \$11,996 69
3.5900 5,260 26 17 256 95
Av. \$1.8518 \$191,233 26

* Removed beyond city limits and presumably fed to swine. † Contract for disposal.

Total as above.

Add total of day labor table (between pages 114 and 115).

Net amount of appropriation.

\$491,232 26 1,598,675 49 \$2,089,907 75

### Cost of Collection and Disposal of Refuse by Day Labor Force in the City of Boston for the Year Ending December 31, 1927.

			С	OST PER TON	BY DISTRICTS.				Cost of D	ISTRICTS.			
Districts and Popu- lation.	Character of Refuse.	Tona (2,000 lbs.)	Total Tons.	To Collect.	For Disposal.	Total Collection and Disposal,	To Collect.	Total Cost to Collect.	For Disposal.	Total Cost of Disposal.	Total Cost of Collection and Disposal.	Total Cost per Capita, Collection, and Disposal.	Where Disposed of.
	Mixed refuse, principally ashes (no kitchen wastes)	43,113		\$2 0775	\$0 0355	\$2 1130	\$89,569 13		\$1,530 00				Coleman Disposal Company.
1 (73,162)	Garbage, principally kitchen wastes	5,214		7 2630		7 2636	37,872 72						Coleman Disposal Company.
	Store refuse, principally paper	51	48,378	4 4117		4 4117	225 00	\$127,666 85		1,530 00	\$129,196 85	\$1 7659	Colemaa Disposal Company,
			40,010	Av. \$2 6388	Av. \$0 0355	Av. \$2 6743		\$127,000 80		1,000 00	3129,190 80	\$1.7059	
3 (39,047)	Mixed refuse, principally ashes (no kitchen wastes)	22,382		\$2 168	\$0 4508	\$2 6192	48 534 29		10 089 50				Coleman Disposal Company.
3 (35,0x1)	Garbage, principally kitchen wastes	4,204	26,586	2 7528		2 7528	11 573 04	60 107 33		10 089 50	70 196 83	1 7978	Coleman Disposal Company.
			,	Av. \$2 6404	Av. \$0 4508	Av. \$3 0912				10000	10 200 00	11010	
	Mixed refuse, principally ashes (no kitchen wastea)	94,185		\$2 9750		\$2 9781	\$280,291 83		\$213 15				Coleman Disposal Company.
5 (part) and 7 (156,405)	Garbage, principally kitchen wastes	35,729		3 4399		3 4399	122,907 66						Coleman Disposal Company.
(100)100)	Store refuse, principally paper	774	130,688			15 4939		415,121 78		213 15	415,334 93	2 6555	Coleman Disposal Company.
				Av. \$3 1764	Av. \$0 0022	Av. \$3,1786		1			,	1 - 5556	
	(Mixed refuse, principally ashes (no kitchen wastea)			\$3 5179	\$0 0683	\$3 5862	\$283,160 47		\$5,501 25				Coleman Disposal Company.
8 and 9 (118,216)	Garbage, principally kitched wastes			6 4165			1		2,798 00				Coleman Disposal Company.
	Store refuse, principally paper	3,561	100,759			10 8287		427.923 42		8,291 25	437.214 69	3 6984	Coleman Disposal Company.
				Av. \$4 2470	Av. \$0 0853					.,			
	Mixed refuse, principally ashes (no kitchen wastes)				}	\$3 0523							Coleman Disposal Company.
10 (75,029):	Garbage, principally kitchen wastes					4 9332							Coleman Disposal Company.
	Store refuse, principally paper	1,295	59,266			9 6621		\$201,732 21			\$201,732 21	2 6887	Coleman Disposal Company.
*	Coleman Disposal Company				9	Av. \$3 4039				345,000 00	345,000 00		
461,859	Totals		365,677	Av. \$3 373	Av. \$0 998	Av. \$4 3711		\$1,233,551 59	)	\$365,123 90	\$1,598,675 49	\$3 461-	1

*The amount paid to Coleman Disposal Company is for disposal of all refuse collected by the city force and Dorchester contracts.

District 6 on page 114.

Total as above.

Add total of contract table, page 114.

Net amount of appropriation.

\$2,089,907 75

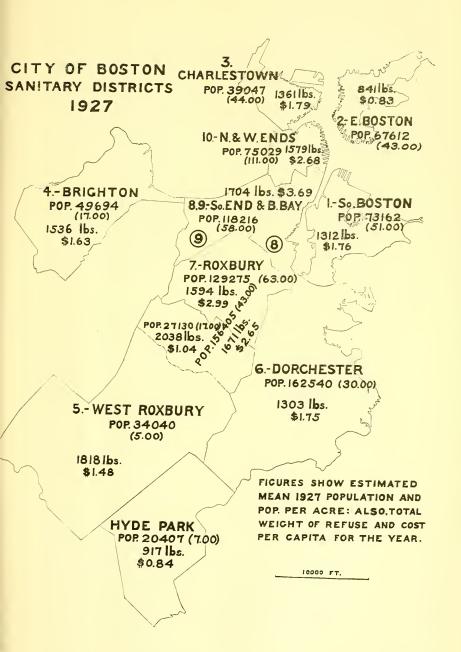
Coleman Disposal Company's contract calls for \$345,000 per year.



### Details of Collected Refuse in Boston for the Year Ending December 31, 1927.

	1								-	ASH	710															GARBAGE							0									-	
	1									ASH	E8.															JARBAGE										W.	ASTE ANI	RUBBI	SH,			_	Couppin
						Carts.				Torus	Сомв			E WRIGHT		OTAL WEIG	нте.	GRAND			CAR	re,			TOTALS	Costn		Avenage		T074	t Wrionys.	GRAN. TOTAL		c	Carps			WAG	DONS.		Сомви	ED .	COMBINED TOTALS OF SHES, GARBAG WASTE AND RUBBISD.
Districts.	Popula- tion.	Class of Labor.	NOM	DEB OF	LOADS.		VERAOR C	APACITY			Тот	12.0.		ис Уапа,	CITY	HIRED.	CON-	TOTALS	NUM	DER OF LO	iD9,	AVER	AGE CAPAGE	rr.		Tora	LØ.	PER CUDIC	Y van			TOTAL		AVER	AOB WEIGH	TOTALS		OAREVA	S WEIGHT.	TOTALS.	TOTAL	١.	Runnen.
							CCBIC T	ARDS.		Cubic Yards.	Londs,	Cubic Yards										ce	BIG TANDS.		Cubia		Culsia		1	CITT. CC	NTRACT E		Number of Loads				Number of Loads						1
			Single.	Double	Auto.	SINOLE	DOUB	LE. A		Yards.	Londs,	Yards	Pounds	Tone	Tons	Total	Tona	Tons.	Single	Double.		Single.	Double.	Auto.	Cubie Yards.	Loads.	Yarda.	Pounds	Tons.	Tons,	Tons. T	Tons		Poun	ds Tons	Tons.		Pounds	. Tons.	Tons,	Londs. 7	ons.	eads. Tons
South Boston	73,162	City	8,859		5,978	2	8 .		14	105,708	14,534	105,798	815	. 4075				43,113	3,413		976	2		2	8,838	4,419	8,838	1,180	.59	5,214		5,21		2,46	00	1	40	2,200	1.1	51	46	51	19,209 48,37
East Boston.	67,612	Contract		8,34	0 2,236			5	10	64,060	10,576	64,060				1 .	20,104	20,104		1,120			3 5	.	3,952	1,129	3,952				2,332	2,33	2	1	1 .		1 .						11,700 28,40
Charlestown	39,047	City Hared	5,879 208		2,837	2 2	5 .		. 14	54,416 508	8,024	54,024		1	22,176	207	1	22,382	280		460	2	1	14	7,126	749	7,126			4,204		4,20	, }.							. ]		- [	9,673 26,58
Brighton	40,694	Contract			6,132				10	61,320	6,132	61,320			1		24,088	24,088		2,701	1,290		3.5	10	22,354	3,901	22,354		- 1		13,180 .	13,18				100	1						10,123 38,17
West Rosbury	61,170	Contract City,		0.3	5,698 2,221			5		88,080 34,289	8,858	91,260			13,978		23,210	37,192	47	125	1,310	2	3.5	10 14	13,100 23,002	3,087	30,102			13,571	7,729	21,30	0 }	D .		1 .	. 01			100	07	104	11,742 58.50
Dorchester,	162,540	Contract		24,78	0 19,060			5	10	224,620	34,855	224,020					91,533	91,533	1,164	6,214	38	2	3 5	10	24,427	7,413	24,427		1		14,412 .	14,41	2			1						- 4	42,268 105,9
Roxbury	129,275	City	9,691	4,56	8 10,600	2	B	5	14	198,839	24,958	196,830			80,212			80,212	4,573	1,177	1,735	2	3 5	14	37,556	7,485	37,556			22,158		. 22,15	8 46	2		323	318			347	777	670	33,217 103.0
South End and Back Bay,	118,216	City.,	23,855		0.840	2	5		14	107,524	33,704	197,521			50,491			80.491	10,326	168	531	2	3 5	14	28,317	10,923	28,317			16,707		18,79	7 1,25	4		878				2,683	3,693	3,561	48,320 100,7
North and West End.	78,929	City, Hired	13,691 19,327	43	2,826	2 2	8 .	0	14	73,792 51,153	36,343	124,945			30,070	29,845		50,918	5,974			2 2			11,948 12	5,980	11,960			7,049		7.05	0		. 1	1	1,18			1,208	1,177	1,295	43,500 59,2
Hyde Park	20,407	Contract		3,69	8 79			5	10	19,280	3,777	19,280					7,857	7,857		828			3		2,478	828	2,478				1,462	1,46	a										4,603 9,3
Totals	798,182		81,510	42,45	9 59,689				. 1	,140,579	182,058	1,140,579			. 226,021	21,052	173,701	464,787	25,813	12,238	7,981				183,110	48,002	183,110			65,903	39,124	7 108,93	1,72	2 .		1,208	4,06			4,478	5,790	5,681	34,450 \$78,5





# SANITARY DIVISION.—STREET CLEANING DIVISION.

General administration:				
Salary division engineer (in				
part)	\$2,374	99		
Salary, deputy supervisor . Pensions, retired veterans .	3,500 2,334 6,030	00		
Pensions, retired veterans .	2,334	25	•	
Pensions, retired laborers	6,030	62		
Annuity, Acts of 1920 — chap-				
ter 132	600	00		
Salary, medical inspector	2,222	45		
Salary, chief veterinarian .	2,222 1,000 4,183	00		
Injured employees	4,183	42		
Telephone	737 718	90		
Printing and stationery	718	44		
Advertising	9	00		
Miscellaneous	3	00		
Salary — chauffeur — divi-				
Sion engineer	1,625	35		
Auto repairs and maintenance,	3,110			
,			\$28,449	44
General expense other than genera	l administ	trat	•	
Wages stablemen	\$52,003	33	1011.	
Wages wardman	11,996	82		
Wages, yardmen	8,681	27		
Wages, watermen	5,346	47		
Wages, clerks	40,520	38		
Light	1,527	55		
Light	384	01		
Horsehoeing	2,678	35		
Horsehoeing	192	00		
		17		
Fuel	$\frac{610}{150}$	00		
Fuel	1,737	37		
Stable and yards, supplies  Stable and yards, building re-	1,101	91		
noire	2,386	36		
pairs	1,050	00		
Auto repairs and maintenance	6.012	87		
Auto repairs and maintenance,	0,013	01	135,278	85
Operating expenses.			155,216	00
Operating expenses:	\$20.554	06		
Salaries, district foremen	#20,00 <del>1</del>	16		
Salaries, district foremen Salaries, inspectors	600 129	62		
Holidaya and pay allowed	10.595	37		
Trondays and pay anowed .	19,585	01		
Carried forward	\$855,244	50	\$163,728	29

Brought forward	\$855,244 50	\$163,728 29
Vacations	18,909 96	\$200,.20 Z
Vacations	21,662 31	
Dumps use of	1,039 05	
Snow license	500 00	
Dumps, use of Snow license	8 140 20	
Cart repairs	8,149 29 294 47	
Vohiala cumplias	$153 \ 05$	
Vehicle supplies Sweeping machine repairs	128 48	
Bugh contained harrold	1,105 08	
Push carts and barrels		
Push brooms, teamsters' brooms,		
etc	2,075 00	
Machine brooms	2,112 00	
Sand barrels	224 94	
Sand	1,053 51	
Water cart hose	239 81	
Shovels, hoes and picks, etc	1,028 90	
Hired autos	66,669 00	
Hired teaming	1,403 00 9,489 09	
Snow plows, parts, etc.	9.489 09	
Snow plows, parts, etc Shops, stock for repairs	10,430 98	
Autos, repairs and maintenance,	61 333 29	
ratios, repairs and maintenance,		899,517 42
		\$1,063,245 71
		\$1,063,245 71
STREET OILING AND V	VATERING	
STREET OILING AND V	VATERING	
General administration:	VATERING	
General administration: Salary, division engineer (in		
General administration: Salary, division engineer (in		
General administration: Salary, division engineer (in part)	\$125 00 37 82	
General administration: Salary, division engineer (in part) Printing and stationery Telephone	\$125 00 37 82 42 60	
General administration: Salary, division engineer (in part) Printing and stationery Telephone	\$125 00 37 82 42 60	
General administration: Salary, division engineer (in part) Printing and stationery Telephone	\$125 00 37 82 42 60	
General administration: Salary, division engineer (in part)	\$125 00 37 82 42 60	
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than general	\$125 00 37 82 42 60 4 50 873 22	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation:	\$125 00 37 82 42 60 4 50 873 22 al administra-	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen.	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops stock for repairs	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops stock for repairs	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops stock for repairs	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops stock for repairs	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops stock for repairs	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55	BRANCH. \$1,083 14
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops, stock for repairs Horseshoeing Miscellaneous Land and building repairs . Auto repairs and maintenance,	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55	BRANCH.
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops, stock for repairs Horseshoeing Miscellaneous Land and building repairs . Auto repairs and maintenance, Operating expenses:	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55 95 00 128 65 38 63 631 50	BRANCH. \$1,083 14
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops, stock for repairs Horseshoeing Miscellaneous Land and building repairs . Auto repairs and maintenance, Operating expenses: Road oil	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55 95 00 128 65 38 63 631 50 ————————————————————————————————————	BRANCH. \$1,083 14
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops, stock for repairs Horseshoeing Miscellaneous Land and building repairs . Auto repairs and maintenance, Operating expenses:	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55 95 00 128 65 38 63 631 50	BRANCH. \$1,083 14
General administration: Salary, division engineer (in part) Printing and stationery Telephone Miscellaneous Auto repairs and maintenance, General expense other than generation: Wages of stablemen Hay and grain Shops, stock for repairs Horseshoeing Miscellaneous Land and building repairs Auto repairs and maintenance, Operating expenses: Road oil Sand	\$125 00 37 82 42 60 4 50 873 22 al administra- \$295 50 167 50 69 55 95 00 128 65 38 63 631 50 ————————————————————————————————————	BRANCH. \$1,083 14

$Brought\ forward$	d				\$27,538	27	\$2,509	47
Demurrage .			·	•	33		<i>\$</i> -,555	~ •
Calcide .		•		•	783			
Tools	•	•	•		36			
Miscellaneous		•	•	•	246			
Miscellaneous		•	•	•	210		28,637	10
Inspection:							20,007	10
General foreman					\$2,100	00		
Oil		•		•	2,428			
Water	•	•	•	•	20			
O-1-1-1-	•	•	•	•	64	_		
Sanding .	•		•	•	531			
	•	•	•	•				
Building repairs		•	•	•	187			
Standpipes .	•	•			26	82	¥ 0.00	0.4
							5,360	04
Labor:								
Oil					\$1,381			
Water					314	50		
Standpipes .					218	25		
Sanding .					7,657	51		
Calcide .					254	50		
Holiday .					477	00		
77 1.0		·		·	497			
Showers .	•	•	•	•		44		
Land and building	t nor	•	•	•	1,575			
Miscellaneous	18		•		400			
Miscellaneous	•	•	•	•	400	10	12,868	15
							12,808	40
							\$49,375	06
							#10,010	<u> </u>
Street cleaning exp	on d	ituro	a	@1	063 245	17		
					,000,240	11		
Street watering a			_		40.975	OC		
penditures .		•		•	49,375		1110.000	
						}	31,112,620	11

### DISTRIBUTION OF EXPENDITURES.

DIOTITIDO LICITOR	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Removing snow	\$310,109 21
Snow work on crossings and	
gutters	
Bacters	\$322,646 36
Eluabing atmosts	
Flushing streets	
Street patrolling	54,585 $55$
Push cart patrolling	164,239 86
Refuse box collections	26.813 75
	268,316 20
	95,037 78
Cleaning of streets by motor	
machines	48,900 34
Public alleys	3,069 63
Sanding of slippery streets	8,859 15
Sanding of suppery streets	
	<del></del>
Total	\$1,063,245 71
Oiling of public streets and ways	45.255 16
Watering of public streets and wa	4 119 90
matering of public streets and wa	1,110 00
	@1 110 COO 77
Total	\$1,112,620 77

### Summary.

Items.	STREE	r Cleaning E	Branch.	STREET V	Vatering ani Branch.	OILING
	1925.	1926.	1927.	1925.	1926.	1927.
bor	\$582,879 49	\$749,049 39	\$832,665 00	\$17,860 00	\$19,568 45	\$18,734 53
aming	27,366 90	62,807 10	68,072 00	5,176 50	395 00	
pplies and repairs	127,502 64	136,542 82	162,508 71	30,384 38	31,495 43	30,640 53
Totals	\$737,749 03	\$993,399 31	\$1,063,245 71	\$53,420 88	\$51,458 88	\$49,375 06

Macadam Streets Oiled — Cost of Labor, Teaming, Oil, etc., Including Supervision.

		, , , , , , , , , , , , , , , , , , , ,	9)	, , , , , ,				
Districts	Area Oiled Once,	Equivalent Mileage,	DATES O	DATES OF OILING.	Total Cost.	Cost per Square Yard	Gallons	Gallons
	Square Yards.	30-Foot Roadway.	First.	Last.		Covered Once.	Used.	Square Yards.
South Boston	259,434	14,740	May 20	Aug. 16	\$5,656 52	\$0.0218	37,192	.1433
East Boston	63,652	3,616	May 3	May	1,511 61	.0237	8,130	.1277
Charlestown	78,884	4,482	June 1	June 6	1,781 51	.0225	13,089	.1659
Brighton	142,942	8,121	April 25	Aug. 30	3,085 54	.0215	20,451	.1430
West Roxbury	258,049	14,662	April 30	Sept. 16	6,351 49	.0246	47,867	1855
Dorchester	452,958	25,736	May 4	Sept. 16	9,087 19	.0200	62,763	.1385
Roxbury	408,111	23,188	April 25	Sept.	8 10,048 60	.0246	67,506	.1654
South End	82,253	4,673	April 30	Sept.	8 3,234 15	.0393	11,843	.1439
Hyde Park	202,062	11,480	May 11	Sept. 12	4,498 55	.0222	31,607	.1564
Totals	1,948,345	111,698			. \$45,255 16		300,448	
Average						\$0.0232		.1542

### Cleaning of Paved Streets and Macadam Gutters, 1927.

					TOTAL PAVED STREETS AND						LOA	DS OF DIE	RT REMOV	ED.				cu	BIC YARD	S OF DIR	T REMOVI	ED.		
	Paved S	TREETS	MACADAM	GUTTERS,	MACADAM GUTTERA,	PAVED	STREETS AND	MACADAM G	UTTERS.	Paved S	TREETS.	MACADAM	GUTTERS,	PAVED STI MACADAM	GUTTERS.	Ра	ved Street	es.	Mac	adam Gdtt	ena,	Pav Mac	ED STREETS.	AND BRS.
Distract.	Square Yards Cleaned Once.	Equivalent Mileage 30-foot Roadway Cleaned, Once.	Square Ysrds Cleaned Opce.	Linear Miles Cleaned Once.	Clenned Once.	Inspection, Labor.	All Other Charges,	Total Cost,	Cost per Thousand Square Yards Cleaned Once.	Loads.	Cost per Load.	Loada.	Cost per Load.	Loads.	Cost per Load.	Total Cubic Yards.	Per Thousand Square Yards.	Cost per Cubic Yard Removed.	Total Cubic Yards.	Per Thousand Square Yards.	Cost per Cubic Yard Removed.	Totsl Cubic Yards.	Per Thousand Square Yards.	Cost per Cubic Yard Removed.
South Boston	12,282,837	697.88	1,953,720	370.00	14,236,657	\$27,904 95	\$13,217 70	\$41,122 65	\$2.888	4,363	\$5.996	1,483	\$10.086	5,846	\$7.034	8,726	.7104	\$2.998	2,966	1.518	\$5.043	11,692	.821	\$3.617
East Boston	9,554,385	542.86	4,190,828	793.71	13,745,213	33,563 53	7,531 25	41,094 78	2.989	3,564	5.816	3,189	6.386	6,753	6.085	7,128	.7466	2,908	6,378	1.521	3.193	13,506	.982	3.043
Charlestown	14,202,547	806.96	3,006,828	569.47	17,209,375	19,841 79	11,794 23	31,636 02	1.838	2,416	8.612	810	13.367	3,226	9.806	4,832	.3402	4.306	1,620	. 538	6.684	6,452	.374	4.903
Dorchester	11,854,960	573.57	4,125,780	781.39	15,980,740	23,967 40	9,154 44	33,121 84	2.072	3,286	5.609	3,229	4.548	6,515	5.083	6,572	. 5543	2.804	6,458	1.565	2.274	13,030	.816	2.541
Roxbury	5,216,781	296.4	1,084,725	205.44	6,301,506	12,088 41	2,654 51	14,742 92	2.339	1,827	4.58	1,322	4.822	3,140	4.681	3,654	.7004	2.29	2,644	2.437	2.411	6,298	.999	2.34
Uptown and Back Bay	34,077,409	1,936 21	4,704,880	891.07	38,782,289	34,679 45	10,732 74	45,412 19	1.17	2,253	7.807	2,986	9.317	5,239	8.668	4,506	. 1322	3,904	5,972	1.269	4.658	10,478	.2701	4.334
Downtown	80,090,834	4,550.61			80,090,834	43,347 24	17,078 32	60,425 56	.754	5,669	10.658			5,669	10.658	11,338	.1415	5.329				11,338	. 1415	5.329
North and West Ends	86,695,384	4,925 87			86,695,384	67,747 35	28,050 66	95,798 02	1.104	10,662	8.985			10,662	8.985	21,324	.2459	4.492				21,324	, 2459	4.492
Totals.	253,975,137	14,430.36	19,066,751	3,611.08	273,041,898	\$263,140 13	\$100,213 85	\$363,353 98		34,040		13,019		47,059		68,080			26,038			94,118		
Average									\$1.33		\$7.882		\$7.299	<b></b>	\$7.721		.2679	\$3.941		1.365	\$3.549		.3447	\$3.86



### APPENDIX E.

# REPORT OF THE DIVISION ENGINEER OF THE SEWER DIVISION.

Boston, January 1, 1928.

Mr. James H. Sullivan,

Commissioner of Public Works.

Dear Sir,— I submit herewith a statement of the activities and expenditures of the Sewer Division for the year ended December 31, 1927.

On January 1, 1927, the Sewer and Sanitary Division was divided, and the Sewer Service was made the Sewer Division, separate from the Sanitary Division.

During the fiscal year 1927 there were built by contractors, day labor and private parties, 18.73 miles of sewers and surface drains throughout the city, making a total of 1,028.59 miles of common sewers and surface drains, which added to 30.93 miles of intercepting sewers, make a grand total of 1,059.52 miles of common and intercepting sewers under the care of the Sewer Division on January 1, 1928.

Six hundred and eighty-two (682) catch-basins were built or rebuilt during the year, making a total of 17,989 under the care of the Sewer Division on January 1, 1928. Six thousand, five hundred eighty (6,580) catch-basins and sixty-six (66) drop inlets were cleaned by contract, the total amount of material removed being 23,184.18 cubic yards.

Three thousand thirty-six (3,036) permits have been issued, as follows: 580 to district foremen and contractors for new construction work, and 2,456 permits to drain layers for laying new house drains or repairing old ones.

Entrance fees to the amount of \$10,664.28 have been deposited with the City Collector for collection from estates upon which no sewer assessment was ever paid, in accordance with the City Ordinances of 1910, chapter 9, section 10.

One thousand, seven hundred fifty-one (1,751) complaints on floodings and other causes have been investigated and reported on; also the gasolene traps in 504 garages have been inspected.

Plans for the assessment of estates for sewer construction have been furnished the Board of Street Commissioners, representing 48,217.75 linear feet of sewers and

appurtenances, costing \$319,230.89.

Reported to the City Collector on 4,044 municipal liens in accordance with chapter 60, section 23, of the General Laws, and in addition there were 7,500 reported orally to persons making requests at the Sewer Division office.

The principal works built, together with the sewerage works recommended for the coming year, are as follows:

### CITY PROPER.

The widening of Kneeland street, Faneuil Hall square, and Dock square, required new sewers which were built, encased in concrete.

A new pipe sewer encased in concrete was built to replace the old broken down sewer in Piedmont street.

The laying of a 48-inch water pipe necessitated the building of a supplementary pipe sewer by the Water Division, through the Abraham Lincoln School yard adjacent to Arlington street.

Sewerage works will be required on account of the widening of Causeway street, the widening and extension of Nashua street and the extension of Lowell street, also the changing of the grade of Buckingham street.

The Charles river harbor line has been moved outward in the rear of the North Station, so that when the filling in begins, it will be necessary to reconstruct our sewer outlets in that vicinity with special attention to improving drainage conditions in the Canal street and Beverly street districts.

Investigation of complaints in Congress street, Clark street and Alley 824 at rear of Northfield street, shows

that these sewers should be rebuilt.

In Belvidere street the separate systems of drainage

should be constructed.

The proposed building of a tunnel across Bedford street near Harrison avenue will require the diverting of the Bedford street sewer down Harrison avenue to Hayward place.

A modern type of regulator should be built to replace the existing one at Beacon street near Brimmer street.

### ROXBURY.

Pipe sewers were petitioned for and built in Bowditch court, Cheney street and Maple street, and the old brick sewer in a part of Hampden street was replaced by a concrete structure.

The separate systems of drainage were built in Harold street and catch-basins and drains in Brookline avenue, Dudley street and Quincy street in advance of the

permanent pavement.

The sewerage works for Alley 931 and outlet across Boylston street, near Audubon road should be built in advance of the proposed permanent pavement.

Sewers have been petitioned for in Logan street,

Regent court and the Riverway.

A section of the Hampden street sewer, the Dorchester brook overflow north of Massachusetts avenue, and the rebuilding of the Huntington avenue siphon at the Brookline town line, are all recommended for construction.

### SOUTH BOSTON.

Sewerage works were built in advance of permanent pavement in A street and E street, on petition of the abutters in Thomas park, and a sewer was built in

Hardy street by private parties.

Sewerage works should be built in advance of the proposed permanent pavement in D street, between West First and Claffin streets. On the west side it is proposed to extend the D and Damrell streets overflow across the Midland Division of the New York, New Haven & Hartford Railroad.

A study is being made under a legislative resolve for the development of the whole South Bay, which will

call for sewerage works of great magnitude.

### East Boston.

The 12-foot by 10-foot reinforced concrete overflow for the Porter street district, authorized by the Massachusetts Legislature under chapter 259 of the Acts of 1926, is under construction and will continue so during the coming year. With the exception of a surface drain built in Chelsea place by the Park Department, the work in this district has consisted of minor improvements made in the

present system.

Sewerage works will be required in Barnes avenue, Bayswater street and Thurston street which have been laid out and ordered constructed under chapter 393 of the Acts of 1906, and for the petitioners in Lubec street.

The Marginal street overflow near Lewis street is to

be extended to the new State Bulkhead.

### Charlestown.

Catch-basins were built in Medford street in advance of the resurfacing, and a sewer was built for the petitioners in Tremont street.

The surface drain outlets from Alford street are to be relocated on account of being cut off by the solid filling placed on the property of the Boston Elevated

Railwav.

The laying out of Irving place as a public way, the street changes at Sullivan square and the petition from Short Street court will all require sewerage works during the coming year.

### Brighton.

A section of the easterly branch of the Shepard brook in Arthur street, consisting of a 5-foot 3-inch concrete

surface drain, was completed during the year.

Contracts were awarded for sewers in Beechcroft street, Lane park and Rose Garden circle, all of which had been petitioned for, and in Colborne road, Ransom road, Euston road, Claymoss road, Gardner street, Faneuil street, Parsons street and Bennett street, which were laid out as public streets under chapter 393 of the Acts of 1906.

Sewerage works were built by private parties in Durland street, Duncklee street, Gillard road and

Seminary road.

Sewerage works are recommended in Cambridge street, which is to be resurfaced in Hatherly road, and outlet in Foster street; and in Alberta road, Western avenue, Perthshire road, Chiswick terrace, Chiswick road west, Chestnut terrace, Kenrick street and Langley road, which have been petitioned for.

Sewerage works will also be required in the following streets, viz.: Commonwealth avenue (outlet for Colborne road), Gerald road and outlet in Gillard road, Lane park, Adamson street, Riverview road, Brooksdale road and outlets in Ranelegh road, Hobart street and Parsons street, which are to be laid out and constructed under chapter 393 of the Acts of 1906.

The concrete surface drain for Shepard brook should be extended, also the open brook course in private land off Foster street should be replaced with a new surface

drain.

A storm water outlet should be built for the relief of the Pratt street district.

### West Roxbury.

Sewerage works were built in Ashland street on account of widening, and in Eldridge road, Murray Hill road, St. Joseph street extension, Olmstead street, Midvale road, Stellman road, Roslindale avenue and Nikisch avenue in advance of chapter 393, street construction.

On petition of the abutters, sewerage works were built in Cedar street, Hayes street, Wolfe street, Summit road, Bates street, Jeffers street, Mansfield street, Weeks avenue, Alpheus road, Hyde Park avenue, Lindall street, Emmons road, West Saville street, Knoll street, St. Peter street, Cottage avenue, private land (outlet for South street), Atlantis street, Perham street, West Border road, West Roxbury Parkway, New Park avenue, Lasell street, Sedgwick street, Rossmore road, Forest Hills street, Winchester road, Zamora court, Brook road, Ferndale road, Stimson street, Grove street, Birchwood street, Woodbrier road, private land, Wedgemere road, Centre street, Hodgdon terrace, Pond circle and Guernsey street.

For the general improvement of the system, sewerage works were built in private land and Park Lane street, Poplar street, Stellman road and Seeanar road, and by

private parties in Vale street and Stella road.

More than sixty petitions for sewers are on file for this district alone, and sewerage works should be built in the order of their importance.

in the order of their importance.

The proposed permanent pavement in Cornell street, the resurfacing of Forest Hills street and Grove street, and the street construction ordered under chapter 393 in Leniston street, Doncaster street and Willow street and outlets in Weld street and Dunbar street will all require sewerage works.

A section of Stony brook and Roslindale brook should

be built each year until the work is completed.

### DORCHESTER.

The widening of Oakland street and River street and the building of the Southern Artery, under Special Acts of the Massachusetts Legislature, made a cross-town thoroughfare and necessitated the building of a large amount of sewerage works.

A part of the open water course of Davenport brook was replaced with a 7-foot 9-inch by 6-foot 2-inch double

concrete conduit.

Sewerage works were constructed in Newkirk street, Ginita street, Adams street, Gene street, Hazleton street, Donald road, Frontenac street, Hosmer street, Elm avenue, Milton avenue extension, Wilder road, Norfolk terrace, Ormond street, Myrtlebank avenue, Hillsboro road, Chester street, Halborn street, Livingstone street, Dyer avenue, Harvard street, Emerson avenue, Rangeley street and outlet in private land, Owencroft road, Charlemont street, Vera street, Druid street and outlet in Morton street, on petitions of the abutters; in Rockdale street, Winston road, Crowell street and Mildred avenue in advance of chapter 393, street construction, and in Quincy street on account of street resurfacing.

The abutters in this district, as well as in other outlying districts, are sending in numerous petitions for new sewers, most of which are urgent and require

building.

Morton street, to be widened under a Special Act of the Legislature, and Greenfield road, laid out under chapter 393, Acts 1906, will require sewerage works.

A tide-gate chamber in Dorchester avenue at Hoyt street is needed, also the installation of a new regulator in the old chamber of the Dorchester intercepting sewer near Mt. Vernon street, and the rebuilding of sewers in Dudley street and Crescent avenue, and in River street on account of the repaving; also a connection between the Forest avenue trunk sewer and the Talbot avenue high level sewer in Irma street.

The open waterway of Oakland brook, which is proposed to be replaced by a masonry structure in Favre

street, Richmond road and private land; the Tuttle street outlet in Sydney street, the Auckland street surface drain and the King street overflow are all worthy projects for the general improvement of the areas they serve.

### HYDE PARK.

Sunnyside street, Violante street, Milton street and Reservoir street were all built as the result of petitions for sewerage works from the abutters.

On account of the widening of River street a large amount of sewerage works has been built in the street

itself, as well as outlets in adjacent streets.

Sewerage works for Caton street, laid out as a public street, Summit avenue, Metropolitan avenue and other streets, in which the abutters have petitioned for sewers, are all recommended for construction; and the pipe sewer for Oakwood street outlet in Pinewood street and George street extended are recommended to be built.

Sewerage works for Dana avenue and outlet in Water street and land of New York, Hew Haven & Hartford Railroad and Metropolitan District Commission; Readville brook in Norton street, Manilla street and Vaughan street; Business street, Barry street, River street and outlet in private land between Mother brook and Business street; George street and Garfield avenue and outlet in Water street, are all required for the handling of the surface water and to prevent floodings.

### Pumping Station — Calf Pasture.

Raising and underpinning the boiler foundations, building new foundations and floor for the carpenter shop, and a new suction chamber for No. 5 pump, were the principal items of construction at this place.

The present No. 3 and No. 4 pumps are about forty-five years old and should be replaced by four centrifugal

pumps, probably electrically driven.

Float controlled gates are required on the 9-foot sewers at the entrance to the station.

### Moon Island.

Minor improvements have been made and others will be required on the outfall works at Moon Island.

Thomas F. Bowes, Division Engineer.

### SEWER DIVISION.

The work of the Sewer Division is carried on under chapters 27 and 39, Revised Ordinances of 1925, and the following statutes:

Chapter 426, 1897, as amended by 450, 1899, and 268,

1903.

Chapter 283, 1903, as amended by 464, 1907.

Chapter 550, 1907. Chapter 424, 1908.

Chapter 514, 1908.

Chapter 74, Special Acts of 1918.

### THE DUTIES OF THE SEWER DIVISION.

1. Preparation of plans for sewerage works.

2. Construction and maintenance of all sewerage works.

3. Investigation of complaints in regard to defective drainage.

4. The granting of permits for sewer construction.

5. The preparation of plans for the assessment of the cost of sewer construction.

6. The examination of the plans of other corporations proposing to construct works in the public streets with reference to their probable interference with sewerage works.

Total number of permanent employees on pay	
roll December 31, 1926	327
Total number of permanent employees on pay	
roll December 31, 1927	317
Total amount of weekly pay roll for week ending	
December 31, 1926	\$12,674.35
Total amount of weekly pay roll for week ending	
December 31, 1927	\$12,798.20
Total amount of monthly pay roll December 31,	
1926	\$375.02
Total amount of monthly pay roll December 31,	
* Total amount of monthly pension roll Decem-	\$100.00
* Total amount of monthly pension roll Decem-	
ber 31, 1926:	
Veterans	\$235.87
Laborers	\$180.38

^{*}Chapter 32, General Laws (veterans), chapter 413, Acts of 1911, and amendments thereto (laborers).

Public Works Department.	129
Total amount of monthly pension roll December 31, 1927:	
Veterans	\$92.54
Laborers	\$150.00
Average weekly pay roll including monthly roll	
and exclusive of pension roll for fiscal year	
charged as follows:	
Maintenance	\$8,573.83
Construction	\$4,111.52
Average number of permanent men employed .	323
Number of men on pension roll December 31,	
1926:	
Veterans	4
Laborers	6
Number of men on penison roll December 31,	
1927:	
Veterans	2
Laborers	5
Rate of wages paid to common laborers	\$5.00

Financial Statement from January 1, 1927, to December 31, 1927.

	Illaliciai Stat	I mancial scatcinent from Samualy 1, 1721, to occume of, 1721	anuary 1, 13	#1, to Decem	1001 011 1021		
Овявст.	Balances on Hand Jan. 1, 1927.	Appropriations, Loans and Revenue.	Transfers to	Transfers to   Transfers from   Total Credits.	Total Credits.	Expenditures during the Year 1927.	Balances on Hand Dec. 31, 1927.
Sewer Division		\$698,720 43 * \$988 36	* \$988 36		\$699,708 79	\$699,708 79 \$699,708 79	*
Sewerage Works	\$339,882 18	\$339,882 18 1,001,028 34	:	:	1,340,910 52	971,876 75	\$369,033 77
Sewerage Works, Charles River Basin	516 70				516 70		516 70
East Boston Pumping Station and Outlet	713,203 42	:			713,203 42	2,083 61	711,119 81
Totals	\$1,053,602 30	\$1,053,602 30 \$1,699,748 77	\$988 36		\$2,754,339 43	\$2,754,339 43 \$1,673,669 15 \$1,080,670 28	\$1,080,670 28

*From Lighting Service.

### MAINTENANCE EXPENDITURES JANUARY 1, 1927, TO DECEMBER 31, 1927.

Sewer I	DIVISION.			
Improved	Sewerage.			
Pumping Station, Calf Pasture, inside	e .	. \$142,064	55	
Pumping Station, Calf Pasture, inside Pumping Station, Calf Pasture, outside Pumping Station, Calf Pasture, enging Pumping Station, Calf Pasture, boiled Pumping Station, Union Park street Pumping Station, Summer street Pumping Station, Hyde Park	de .	. 32,637	86	
Pumping Station, Calf Pasture, engin	es .	46,357	20	
Pumping Station, Calf Pasture, boiler	rs .	. 25,018	32	
Pumping Station, Union Park street		. 10,217	84	
Pumping Station, Summer street .		. 1,909	91	
Pumping Station, Hyde Park		. 1,405	92	
				\$259,611 60
Moon Island				29,515 77
Main and intercepting sewers				18,195 85
M:	(7)			\$307,323 22
Miscellaneou	is Charge	28.		0.027.04
Maintenance Stony Brook Cleaning catch-basins Yards and lockers Employed at yards Automobiles Horses, carts, harnesses, etc. Teaming				2,237 94
Cleaning catch-basins	•			87,740 01
Yards and lockers				432 03
Employed at yards			0.4	38,972 75
Automobiles		. \$66,700	40	
Horses, carts, harnesses, etc.		. 1,176	40	
Teaming		. 7,816	13	
		\$75,692		
		\$10,002	00	
I ago amount carned by garries teams	and out	`		
Less amount earned by service teams	and auto	93 U09	50	
Less amount earned by service teams trucks	and auto	23,092	50	52 600 13
trucks		. 23,092	50	52,600 13 53,683 21
trucks		. 23,092		53,683 21
trucks		. 23,092	•	53,683 21 23,772 35
trucks		. 23,092	•	53,683 21
trucks		23,092	: 82	53,683 21 23,772 35
trucks		23,092		53,683 21 23,772 35
trucks		23,092		53,683 21 23,772 35
trucks		23,092		53,683 21 23,772 35
trucks		23,092		53,683 21 23,772 35
trucks		23,092	82 34 68 96 88 00	53,683 21 23,772 35
trucks		23,092		53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, Dorchester Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury	у	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 766	82 34 68 96 88 00 50 61	53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, Dorchester Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury	у	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 766 4,215	82 34 68 96 88 00 50 61 31	53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, Dorchester Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury	у	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 766	82 34 68 96 88 90 50 61 31 99	53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, Dorchester Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury Repairing catch-basins, eity proper Repairing sewers, South Boston	у	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 766 4,215 6,460 1,554	82 34 68 96 88 90 50 61 31 99 18	53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, West Roxbur Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury Repairing catch-basins, city proper Repairing sewers, South Boston Repairing sewers, Sast Boston Repairing catch-baston	У	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 4,215 6,460		53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, West Roxbur Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury Repairing catch-basins, city proper Repairing sewers, South Boston Repairing sewers, Sast Boston Repairing catch-baston	У	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 4,215 6,460 1,554 1,882 1,372 1,372	82 34 68 96 88 00 50 61 31 99 18 93 00 06	53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, West Roxbur Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury Repairing catch-basins, city proper Repairing sewers, South Boston Repairing sewers, Sast Boston Repairing catch-baston	У	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 4,215 6,460 1,554 1,882 1,372 1,275 5,670	82 34 68 96 88 00 50 61 31 99 18 93 00 06 88	53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, West Roxbur Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury Repairing catch-basins, city proper Repairing sewers, South Boston Repairing sewers, Sast Boston Repairing catch-baston	У	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 4,215 6,460 1,554 1,882 1,372 1,275 5,670 3,782	82 34 68 96 88 00 61 31 99 18 93 00 06 88 19	53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, West Roxbur Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury Repairing catch-basins, city proper Repairing sewers, South Boston Repairing sewers, Sast Boston Repairing catch-baston	У	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 766 4,215 6,460 1,554 1,882 1,372 1,275 5,670 3,782 1,163	82 34 68 96 88 00 50 61 31 99 18 93 00 68 88 19 71	53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, West Roxbur Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury Repairing catch-basins, city proper Repairing sewers, South Boston Repairing sewers, Sast Boston Repairing catch-baston	У	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 766 4,215 6,460 1,554 1,822 1,372 1,275 5,670 3,782 1,163 3,345	82 34 68 96 88 80 50 61 31 99 18 93 00 68 88 19 71	53,683 21 23,772 35
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, West Roxbur Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury Repairing catch-basins, city proper Repairing sewers, South Boston Repairing sewers, Sast Boston Repairing catch-baston	У	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 766 4,215 6,460 1,554 1,882 1,372 1,275 5,670 3,782 1,163	82 34 68 96 88 80 50 61 31 99 18 93 00 68 88 19 71	53,683 21 23,772 35 2,148 95
Cleaning sewers Office salaries Office expense Repairing department buildings Repairing catch-basins, South Boston Repairing catch-basins, East Boston Repairing catch-basins, Charlestown Repairing catch-basins, Brighton Repairing catch-basins, West Roxbur Repairing catch-basins, Dorchester Repairing catch-basins, Hyde Park Repairing catch-basins, Roxbury Repairing catch-basins, eity proper Repairing sewers, South Boston	У	23,092 \$1,239 2,642 1,332 2,084 1,007 3,489 5,626 766 4,215 6,460 1,554 1,822 1,372 1,275 5,670 3,782 1,163 3,345	82 34 68 96 88 80 50 61 31 99 18 93 00 68 88 19 71	53,683 21 23,772 35

$Brought\ forward$										\$621,019 35
Pension roll (veterans	)									2,264 14
Pension roll (laborers)										1,915 88
										351 00
Annuities Fuel and oil	Ĭ.									2,895 42
Hardware, tools, etc.	•				Ċ	Ċ	Ċ		·	5,738 39
Engines and boilers								Ċ		602 35
Sundries and miscellar	eous	chai	ges.	Ċ	Ċ		Ċ	Ċ	•	40,346 37
Telephones	i cou		8		i.	· ·	Ċ	Ċ	Ċ	470 59
House connections	•	•	•	•	•	•	•	•	•	17,730 88
Rubber goods .	•	•	•	•	•	•	•	•	•	980 44
	•		•	٠	•	•	,	•	•	3,458 61
Gatehouses, Fenway Stock	•		•	•	•	•	•	•	•	11,919 82
Stock	•	•		•	•		•	•	•	11,010 02
										\$709,693 24
			C	redi	t.					ψ·00,000 21
Ct 1. t f d d		on o					Φn	505	65	
Stock transferred and							\$9	,505	60	
Fuel and oil transfe				a c	)H C	011-		170	90	
struction	٠	•	٠	٠		•		478	00	0.004.45
										9,984 45
										econ 709 70
										\$699,708 79
Charges to Various	Parti	es for	· We	ork .	Done	and	Mat	erial	Fur	cnished, etc.
E. J. Carty		•								\$1.88
Elizabeth Mahoney	•	•		•	•	•	•	•	•	20 00
	•	•	•		•			•		6 75
Joseph Buckley .	•	•	•	•	•	•		•	•	30 00
Henry Webber . Philip Capello .	•		•	•		•	•			13 50
Philip Capello . M. H. Levanthal .	•	•					•	•	•	15 00
		•	•	•				•	•	13 55
Estate of John Shay	•		•		•	•	•	*		10 30
Ezra Andleman				•		•	•			15 00
Mary Keliher .	•			•		•	•	•	•	11 00
Mary Norton			•	٠	•					26 70
William E. Riley .	•		•	•		•			•	12 50
Annie Danehy .			•	٠		•	•	•		
H. E. Cline	· i a		•	٠		•				125 00
Blue Diamond Mater	iai C	ompa	ıny					٠	٠	80
Dwight P. Robinson	& Co	., Inc		•	•	•		•	•	* 224 28
Fred E. Bowes	•	•			•			•		13 50
Green Brothers .	•	•					•	•		8 50
Harris Goldman	Ġ	٠.	. •	٠					-	11 00
Metropolitan District	Con	nmiss	ion	٠				٠	٠	10,300 00
A. A. Woods	·	•		٠				•		13 50
										13 50
Schoolhouse Commiss	ion				-				•	* 45 30
Turner Center System Burnett & Sherman	n								٠	15 00
Burnett & Sherman									٠	11 00
Joseph Shinkus			•						•	11 00
Hurley-Driscoll Build	ing (	Jomp	any		•					* 197 81 * 39 44
W. H. Hardy .										
Water Service .										49 00
William Muisa .								-	٠	15 00
Patrick J. Lovett .										6 50
Water Service .										53 29
Jennie Glassman .										15 00
M. A. French .										28 40
										011 070 11
$Carried\ forward$										\$11,379 00

^{*} To the credit of Sewerage Works Appropriation.

Brought forwar	rd										\$11,379	00
Thomas G. Doig											60	75
L. V. Niles .											25	00
Fenway Garage											15	00
David R. Pitnoff											35	00
Edgar O. Hunt											11	
William Perry		•				•	•		•	•	30	
Hotel Brunswick	•	•	•	•	•	•	•	•	•	•	47	
		•	•	•	•	•	•	•	•		11	75
P. & J Besse Comp	any	•			•	•			•	•		10
M. W. Palmer	. 11		•		٠		•		•		* 61	
The Edison Electri	1C 11	lumii	iatir	ig C	$_{ m omp}$	any	•		•		15	
J. Cundo												00
Boston Transit De	part	ment	,								* 191	10
Thomas Carroll											15	00
Supply Departmen	$^{\mathrm{t}}$										1,813	89
Margaret J. Lanno											15	00
T. D. Baxter .											7	12
Brauman & Nudle	•	•		•	•	•	•	•	٠.	•	15	
J. Lynch .		•	•	•	•	•	•	•	•		15	
S. DiNapoli .	•	•			•		•	•	•	•	15	
	•	•	•	•	•	•	•		•			
Mr. Stronberg	•		•				٠	•			15	
Cann's Sea Grill												63
T. Dennehy & Son	ıs										19	
Dominick Santurir											15	
Dorchester Sewer	$\operatorname{Con}$	struc	tion	Con	pai	пy					* 43	84
Barnet Levinbaum	ı										8	50
Rose Jacobstein											12	75
William F. Condor	ì	Ĭ.		•		-					* 87	66
M. A. Christian		•	•	•	•	- 4	•	•	•	•	* 10	41
John D. Lyons	•	•	•	•				•	•	•	* 16	
	C			•		•						50
State Street Trust	COI	npan	y	•	•		•	•				
Elizabeth J. Higgin		•	•	•		•	•					00
Michael J. O'Donr											3	50
William Perry Con												00
William Perry Con	npai	ny									24	00
Artemus R. Wood.											177	72
Boston Elevated R	aily	vav									11	00
W. H. Young & So				•							6	88
T 1 M'11		•	•	•	•	•	•	•	•		8	37
P. Vitale .	•	•	•	•	•	•	•	•	•		8	37
		•	•	•	•	•	•		•		* 50	43
Ormac Company	•	•	•	•		•	•					
Vincent Yonkus			•	•							8	13
State Hotel Compa			•	•		•	•				15	00
Morse Brothers Co											15	
Old Colony Apartr	nent	t									15	
J. Privitero .												00
L. P. Frederico Co	mpa	any									* 26	
Huntley Garage	. *										21	96
Anna Franke .											15	00
M. Guarino .	•	•	•		•						5	00
Quincy Market Co	old	Store	oe I	Vare	hou	ise C	omr	anv				00
Ormac Company		Ctora	8	,,	1100		Jin	J			* 88	
				•		•					26	
Thomas F. Fallon					٠							00
Lloyd H. Chase					•					•	* 71	
Park Department		ċ									* 71	83
C. & R. Construct	ion	Comp	oany								* 4	75
Water Service											* 165	
Tillie Berman											3	63
George Gonia											15	00
Carried forwar	d										\$14,941	19

^{*} To the credit of Sewerage Works Appropriation.

Brought for a	vard							\$14,941 19
James P. Macki								14 38
				•				6 88
Standard Oil Co	mpany	,						$200 \ 00$
Fred Davis .								50 00
B. E. Doyle .								10 00
Uncollected					•			\$15,222 45 521 89
Total amount	collect	ed						\$14,700 56
Entrance fees of Ordinances of							h ·	\$10,664 28

Sewer Division. - Maintenance Expenditures, Detail, 1927.

	0 0 0 0 0 1	94 15	242 70		002 39	9 000 K 4 B		60 00110		1,176 46		2,148 95
neous,	\$6,226 78 34,911 28 2,706 71 114 00		:	\$29 10 573 25		\$1,141 54 1,753 88	\$877 15 4,861 24		\$624 96 129 20	188 30 234 00		\$1,807 94
Miscellaneous	Repairs. Equipment Supplies. Fees.	Dumping	Dumping	WasteRepairs and inspection		CoalGasolene and oil	Hose Hardware, tools, etc		FodderStable goods and supplies,	Departs, wagons and nar- nesses		Stationery and supplies Miseellaneous
Contracts.		\$38,237 97	15,424 39					1,386 24	:			
Stock.						:		\$131 52	:			
Teaning.		\$5,664 00	4,651 11	:			:	266 00			228 00	
Labor.	\$22,741 27	43,750 49	33,365 01	:	38,972 75			15,947 12			2,009 94	
Total Expendi- tures.	\$66,700 04	87,746 61	53,683 21	602 35	38,972 75	2,895 42	5,738 39	17,730 88	1,176 46	-	2,237 94	2,148 95
Accounts.	Automobiles (25)	Cleaning eateh-basins	Cleaning sewers	Engines and boilers	Employed at yards	Fuel and oil	Hardware and tools	House connections	Horses, earts and harnesses		Maintenanee, Stony Brook	Office expense.

Sewer Division. — Maintenance Expenditures, Detail, 1927. — Concluded.

Total Expenditures. \$23,772 35
1,542 37
:
\$1,396 00
:
268 00
198 00
327 00
42 00

														351 00		\$67,015 31	18,085 30	\$48,930 01
_																	:	
	973 95		173 04	905 59	378 48	773 44			306 90	630 36		1,248 36	167 26			\$60,605 98		\$60,605 98
749 00	920 30	302 05	793 25	921 17	235 50	226 10	521 00	376 80	944 13	272 70	157 30	346 00	444 50			\$21,327 51	9,505 65	\$11,821 86
420 00	410 00	00 89	370 00	290 00	404 00	240 00	210 00	24 00	420 00	380 00	219 00	312 00	418 00			\$17,225 11		\$17,225 11
2,320 00	3,322 25	396 56	2,879 02	4,344 23	536 20	643 39	641 00	874 26	3,999 85	2,499 13	787 41	1,439 54	2,159 44		4,180 02	\$259,288 61	5,486 00	\$253,802 61
3,489 00	5,626 50	766 61	4,215 31	6,460 99	1,554 18	1,882 93	1,372 00	. 1,275 06	5,670 88	3,782 19	1,163 71	3,345 90	3,189 20	351 00	4,180 02	\$425,462 52	33,076 95	\$392,385 57
" West Roxbury	" Dorchester	" Hyde Park	" Roxbury	" eity proper	Repairing sewers, South Boston	East Boston	Charlestown	Brighton	West Roxbury	Dorehester	Hyde Park	Roxbury	eity proper		Pension roll, veterans and laborers		Teams Less Credits, \$23,092 50 Stock 9,505 65 Fuel and oil. 478 80	Totals
3	я	u	×	39	Repairing sew	71	<i>n</i>	"	n n	" "	n n	77	#	Annuities	Pension roll, v		Teams Stock Fuel and oil	Totals

## MISCELLANEOUS ACCOUNT, DETAIL.

		Lab	or.					
Vacations				\$9	,935	58		
Sick leave					407	22		
Workingmen's compe	nsatio	on .		2	,339	28		
Miscellaneous				5	,910	98		
Inspection — Compla		De	fec-		,			
tive drainage, preve								
lene entering comm				4	,737	20		
General engineering .					393			
6.010101							\$34,723	56
Teaming, removing si	ow						1,396	
Expert services								00
Transportation							945	42
Repairing streets							1,968	56
Medical attendance							479	
Miscellaneous							758	68
2,22,002,200			•	·				
							\$40.346	37

Sewer Division. - Maintenance Expenditures Detail, 1927.

Autos.			\$395 51			1,213 04						\$1,608 55
Pipe Fittings and Miscel- laneous.		\$12,374 11	3,657 18	6,746 55	1,091 23	3,834 35	754 31		590 93		40 48	\$29,089 14
Stable.			\$662 07	:								\$662 07
Trans- porta- tiou.		\$238 96				178 05			:			\$417 01
Valves.				\$858 48								\$858 48
Packing.				\$632 62								\$632 62
Oil and Gasolene.		\$188 78		1,189 87	121 10							\$1,499 75
Fuel and Power.		\$93,293 61				480 00			2,478 24	636 73	137 94	\$97,026 52
Waste.		\$491 77		:	:	:				:		\$491 77
Teaming.		:	\$80 00				2,896 00		20 00			\$3,026 00
Labor.		\$35,477 32	-27,843 10	36,929 68	23,805 99	23,810 33	14,545 54		7,098 67	1,273 18	1,227 50	\$172,011 31
Total Expendi- tures.		\$142,064 55	32,637 86	46,357 20	25,018 32	29,515 77	18,195 85		10,217 84	1,909 91	1,405 92	\$307,323 22
ACCOUNTS.	Pumping station, Calf Pasture:	Inside	Outside	Engines	Boilers	Moon Island	Main and intercepting sewers	Pumping stations:	Union Park street	Summer street	Hyde Park	Totals

### Recapitulation - Maintenance Detail, 1927.

	Improved Sewerage.	Outside Improved Sewerage.	Totals.
Labor	\$172,011 31	\$259,288 61	\$431,299 92
Contracts.		60,605 98	60,605 98
Teaming hired in city	3,026 00	17,225 11	20,251 11
Waste	491 77	29 01	520 78
Fuel and power	97,026 52	2,226 24	99,252 76
Oil	1,499 75	1,753 88	3,253 63
Packing	632 62		632 62
Valves	858 48		858 48
Transportation, etc	417 01	945 42	1,362 43
Horses, etc	662 07	1,176 46	1,838 53
Pipe fittings and miscellaneous	28,768 07	16,454 94	45,223 01
Telephone	321 07	470 59	791 66
Automobile, repairs and supplies	1,608 55	43,958 77	45,567 32
Stock supplies and miscellaneous		21,327 51	21,327 51
	\$307,323 22	\$425,462 52	\$732,785 74
Credits. Outside Improved Sewerage.			
Labor			
Stock 9,984 45			
Miscellaneous		33,076 95	33,076 95
Totals	\$307,323 22	\$392,385 57	\$699,708 79

### SUPPLIES AND FUEL, ENTIRE SERVICE.

### Supplies.

1,163 pounds grease, 18 and 20 cents.

2,571 pounds waste, 11 to 16 cents.

311 pounds cotton rags, 15 cents.

3,313.8 gallons engine oil, 19.3 and 21.3 cents.

838.7 gallons cylinder oil, 27.5 and 29.5 cents. 5 gallons air cylinder oil, 75 cents.

74 gallons sperm oil, \$1.50 and \$1.40.

423.8 gallons turbine oil, 49.5 and 65 cents.

10 gallons lard oil, \$1.50.

1,269 gallons kerosene oil, 10.9 to  $16\frac{1}{4}$  cents.

### Fuel.

596,247 gallons fuel oil, \$26,523.45. 173 tons anchracite, \$2,360.28. 3,108.63 tons bituminous, \$21,897.38.

# Cleaning Catch-basins, 1927.—(By Contract.)

	Average Total Cost to City per Basin, Including Drop Inlets,	\$6 22	6 27	6 31	7 13	99 2		
	Total Cost of Inspection.	\$1,405 19	795 60	991 12	927 68	277 10	\$4,396 69	
	Average Cubic Yards per Basin.	3.47	3.6	3.44	$\{3.53\}$	2.97		38,175 30 4,396 69 9 50
	Total Drop Inlets Cleaned.	27	22	7	00	61	99	\$38,175 4,396
	Total Basins Cleaned.	2,597	2,088	803	$\left\{\begin{array}{c} 3.52 \\ 641 \end{array}\right\}$	66	6,580	
	Contractor Received by Districts.	\$14,903 86	12,440 35	4,121 31	6,213 61	496 17	\$38,175 30	etors
	Cubic Yards Exca- vated by Contractor,	9,032.64	7,539.60	2,765.97	$\left\{\begin{array}{c} 1,242.03 \\ 2,308.61 \end{array}\right\}$	295.34	23,184.19	Total cost: Contractors Inspections Advertising
•	Price per Cubic Lard,	\$1 65	1 65	1 49	1 75	1 68		Total
	Start and Finish of Work.	$9, 1927 \ 3, 1927 $	9, 1927 $29, 1927$	$\begin{vmatrix} 10, \ 1927 \\ 1, \ 1927 \end{vmatrix}$	$\frac{3, 1927}{1, 1927}$	$\begin{bmatrix} 16, 1927 \\ 7, 1927 \end{bmatrix}$		6,580 66
	Str V	$\{_{\rm Dec.}^{\rm (May)}$	$\{ \substack{\text{May} \\ \text{Nov.}}$	$\left\{ \begin{matrix} May \\ Dec_{\iota} \end{matrix} \right.$	May Nov.	$\begin{cases} \text{Nov.} \\ \text{Dec.} \end{cases}$		
	Contractor.	Patrick J. Healey	Patrick J. Healey	Thomas H. Gorman	Montrose Contracting Company,	David W. Norton		Total catch-basins cleaned Total drop inlets cleaned
	Districts.	1. City proper	2. Roxbury	3. South Boston	4. Charlestown and East Boston	7. Hyde Park	Totals	Total catch-basins cleaned Total drop inlets cleaned
			∾i 141	•	·			

Total cubic yards, material removed, 23,184.19.
Average cost per basin, including drop inlets, \$6.41.

Average cubic yards, material removed per basin, 3.518. Average cost per cubic yard removed, \$1.84.

\$42,581 49

Sewerage Works.

Expenditures, January 1, 1927, to December 31, 1927.

Accounts.	Labor.	Tcaming.	Materials.	Miscellaneous.	Paid to Contractors.	Totals.
Engineers' salaries	\$106,737 94					\$106,737 94
Engineers' expense	5,126 21	\$336 25		\$7,714 88	\$1,884 68	15,062 02
Pumping station	300 00		935 00	44 00	48,401 84	49,680 84
Sundries	1,776 67		4,539 23	127 07		6,442 97
Land takings and court executions				7,434 00		7,434 00
New manholes, entire city	9,220 88	086 50	2,949 49	855 59	8,010 43	21,722 89
New catch-basins, South Boston	2,943 01	159 00	1,205 60	463 71	5,501 21	10,272 53
New catch-basins, East Boston	1,338 58	42 00	417 79	39 84	1,341 27	3,179 48
New catch-basins, Charlestown	96 72	5 00	542 00		673 49	1,317 21
New catch-basins, Brighton	1,346 48	46 50	496 60			1,889 58
New eatch-basins, West Roxbury	4,417 68	152 00	1,838 35	103 20	1,997 89	8,509 12
New catch-basins, Dorchester	4,667 89	306 25	2,865 40	367 96	15,533 59	23,741 09
New catch-basins, Hyde Park	235 96		288 50		4,414 71	4,939 17
New catch-basins, Roxbury	10,367 13	732 25	3,294 39	311 39	9,389 28	24,094 44
New catch-basins, city proper	13,704 51	478 50	3,865 10	1,959 23	13,741 31	33,748 65
Sewers built in entire city	49,489 13	161 25	26,884 58	8,864 44	567,705 42	653,104 82
Totals	\$211,768 79	\$3,105 50	\$50,122 03	\$28,285 31	\$678,595 12	\$971,876 75

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive.

Amount Expended in 1927.		\$1,500 00	142 29	188 31	4,030 58	4,108 14	2,356 30	*		406 84
Character.					Catch-basin drains 16 catch-basins.	Catch-basin drains. 2 manholes. 12 catch-basins.	12" pipe, sanitary Catch-basin drains. 3 manholes. I catch-basin.	Catch-basin drain. 3 manholes. 1 catch-basin.	12" pipe, sanitary.	10" pipe, sanitary
Length. (Feet.)					230	250	439,52 16	56	186.72	226
Built by.					C. Russo	T. J. O'Connell	Charles Struzziery	M. DeSisto Company	Private parties	A, Grande
Finished.					July 21, 1927	Aug. 30, 1927	Oct. 13, 1927			
Begun.					July 11, 1927	July 26, 1927	Sept. 16, 1927			Nov. 14, 1827
Lосапон.	South Boston.	Binford street, from A street to Necco street and Necco street, from Binford street to Necco street.	Fast Seventh street, from Columbia road to O street.	Marine road, from 1 street to K street	Catch-basins and minor drains in E street, from East First street to a point about 1,440 feet northeasterly.	Manholes, catch-basins and catch-basin drain in A street, from Dorchester avenue to Congress street.	Thomas Park, south side, from Covington street to a point 439 feet casterly	East Broadway, from L street to Farragut road.	Hardy street	East Boston, Ashley street, from Boardman street to Whit-

* See Washington street, city proper.

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive.—Continued.

Amount Expended in 1927.	*		<del>}-</del>		\$11,917 05	1,074 08	9,269 36	297 28
Oharacter,	Catch-basin drain. 2 catch-basins.	10" pipe, sanitary. 1 manhole.	10" pipe, sanitary. 1 manhole.					
Length. (Feet.)	34	177.10	38.25					:
Built by.	M. DeSisto Company	Park Department	A. Piatelli					
Finished.								
Begun.								
Г. Босатюм.	East Boston,—Continued.  Marginal street, from about 400 feet west of Jeffries street.	Chelsea place,	CHARLESTOWN.  Tremont street, near Madison avenue	Висентом.	Antwerp street, from Western avenue to Lincolnstreet, Asoc street, from Antwerp street to Litchfield street; Benson street, from Antwerp street to Litchfield street. To make the Litchfield street to	Cambridge street, Davia street, 170m Anterprete to Litchfield street, 170m Royal street to Mansfield street and outlet in Royal street; Commonwealth avenue, north side, from Euvert 600 feet west of Essex street to France	Graylock road, from Glenville road to Allston street; Gordon street, from Pomeroy street to Sunders street; Allston Heights, from Cambridge street to Colon street.	Morris street, from Market street to Glencoe street; Brayton road, from Brayton way to Newton line.

1,247 52	455 95	363 15	11,655 51	3,560 21	3,063 56	345 90	16,081 81
71	121		11,6	20			16,0
			10" pipe, sanitary. 15" pipe, sanitary. 15" pipe, sanitary. 16" pipe, surface. 16" pipe, surface. 17" pipe, surface. 18" pipe, surface. 19" pipe, surface.	10" pipe, sanitary	10"pipe, sanitary. 18" by 15" pipe, surface. Cache-basin drain. 4 manholes. 6 catch-basins.	10" pipe, sanitary. 18" pipe, surface. 26ach-basin drain. 4 manholes. 1 catch-basin.	24" and 12" pipe, surface
		:	402.26 29.760 159.760 166.28 165.28 153.05 238 238	417.98 10 409.95 10	339.60 345.19 108 6	235.57 226 6 6 6 7	479 48 1,041.27 624.55 313.90 191.
			M. Guarino	A. Piatelli	M. Guarino	C. Russo	J. Todesca
			Sept. 15, 1927	Sept. 14, 1927	Oct. 26, 1927	Jan. 11, 1928	
			June 27, 1927	July 25, 1927	Sept. 16, 1927	Dee. 12, 1927	Sept. 26, 1927
Montcalm avenue, from Glencoe street to Dustin street; Etna street, from Saybrook street to Montcalm avenue; Murdock street, from Cushman road to Montcalm avenue.	North Crescent circuit, from Breek avenue to 875 feet easterly.	Wade street, from Commonwealth avenue to 650 feet southwesterly.	street, ton street, from ear, Ramsom of Claymoss ortheasterly; street to 150 street to 85	Lane park, northerly branch, from Foster J. Estreet westerly.	Gardner street, from Alcorn street to Malvern street.	Rose Garden circle, from Foster street east-	Colborn road, from Comnonwealth avenue to Euston road; Ransonn road, from Colborn road to Claymoss road; Euston road, from Claymoss road, from Colborn road, road, from Comnonwealth avenue to Monastery road.

See Washington street, city proper.

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive. -- Continued.

Amount Expended in 1927.	\$1,141 6	6,092 2			4,709 0	427 0	531 2	3,304 3	) 882	3,240 3
Character.	8" pipe, sanitary 10" pipe, surface. 2 manboles.	10" pipe, sanitary	10" pipe, sanitary. 10" pipe, sanitary. 10" pipe, sanitary. 10" pipe, sanitary. 9 manholes.							
Length. (Feet.)	110.10 94.70	49.18 399.41 370.76	209.50 430.20 497.54 219.30							
Built by.	Ormae Company	A. Daddario	Private parties							
Finished.	Nov. 30, 1927	Dec. 21, 1927								
Begun.	Nov. 4, 1927	Oct. 31, 1927								
Г.ослиом.	Brighton.— Continued. Reservoir road, from existing sewer to Boston & Albany Railroad.	Shepard brook, easterly branch in Arthur street, from Hichborn street to North Beacon street.	Durland street, Duncklee road, Seminary road, Gillard road.	West Roxbury.	Morton street, from Morton road to Canterbury street.	Whiting street, Harwood street, Keith street and Baker street.	Corey street, from Centre street to Grayfield avenue.	Baker street, from Elmwood street to Centre street; Nut street, from Glendale road to 200 feets southerly; Riverview street, from North avenue to Upland street.	Hillside avenue, from Clarendon avenue to Summer street.	Private land, Addington road extended, and West Border road, and West Roxbury Parkway.

1,584 19	1,406 33	1,101 07	2,334 54	791 09	852 25	346 56	935 39	1,276 25	116 48	68 092	201 01
	:										
<u>:</u>	:	:	:	<u>:</u>	:	:			:	:	: : :
: : : :		:	:		:	:	:	:	:		
									:	:	•
: : :	:	:	:	:		:			:		
			:								
Realton road, from Willowdean avenue to Weld street.	Rockwood street, from existing sewer to 150 . feet northerly.	View South avenue, from St. Rose street to 1.	Walworth street, from Brook street to Wash- ington street.	Willowdean avenue, from Parkvale road to . Weld street; St. Peter street, from Paul Gore street to 200 feet southwesterly; North Harvard street, from Bertram street to Kingsley street, Brighton.	Goldsmith brook in Pond street, from Moss . Hill road to Rockwood street, from Pond street to private land; private land, from Rockwood street.	Pender street, from Dent street to La Grange . street; Hopkins road, from Pond street to Mt. Walley road.	St. Joseph street, from Woodman street to South street; Dickinson road, from Wastington street to 450 feet southwesterly, Brighton; Sunset street, from Edora street to Parker Hill avenue, Roxbury.	Stratford street, from Woodward road to West Roxbury Parkway; Woodward road, from West Roxbury Parkway ro Stratford street; Boxford terrace, from Park street to 200 feet southwesterly.	Pershing road, from Centre street to Pond View avenue.	Parkway avenue and West Roxbury Park- way; Lasell street, from Harwood street to La Grange street.	Maple street, from Addington road to Weld. street.

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive. — Continued.

	Amount Expended in 1927.	\$6,309 23	54,153 15	5,039 73	12,420 79	6,699 42
	Character.	10" pipe, sanitary	17' by 13' 9'' concrete conduit 11' 3'' by 10' 9'' concrete conduit. 24'' D. S. pipe, surface. 12'' C. I., pipe, surface. 2 manholes.	18" pipe, surface 15" pipe, surface 12" pipe, surface 2 catch-basin drain 5 manholes 2 catch-basins	10" pipe, sanitary. 10" pipe, sanitary. 10" pipe, sanitary. 20" and 10" pipe, surface. 10" pipe, sanitary. 13 manholes.	15" pipe, surface. 12" pipe, surface. 10" pipe, surface. 10" pipe, surface. 2ctafa-basin drain. 12 manholes.
,	Length, (Feet.)	330.70	13.85 213.38 16 26	100.18 66.04 369.59 40	526.42 481.50 419.47 424.40 778.99	630.46 462.49 283.72 289.82 147
, , , , , , , , , , , , , , , , , , , ,	Built by.	Joseph Capone	J. J. Coughlin Sons Company.	Joseph Tedesca	M. DeSisto Company	DcCristoforo Brothers Company.
, ,	Finished.	April 20, 1927	Aug. 4, 1927	April 23, 1927	June 28, 1927	May 2, 1927
	Begun.	Nov. 20, 1926	June 14, 1926	Feb. 9, 1927	March 21, 1927	March 21, 1927
	Location.	West Roxbury.—Continued.  Alaric street, from Spring street to Centre street. Louder's lane, from existing sewer to end of street.	Stony brook, section 10A and Roslindale branch of Stony brook, from Toll Gate way to Bradeen street.	Private land, from Roslindale avenue to Metropolitan avenue; Pheasant street, from Falcon street to Bobolink street.	. La Grange street, from Lasell street to Vernont street; Caspar street, from Metropolitan sewer to Lasell street; Variek road, from Chiswick road to Temple street; Worley street, from Metropolitan sewer to Brook Farm road; Beech street, from Alpheus road to Poplar street.	Russett road, from Weld street to 275 feet southeast of Pierpont road; Pierpont road, from Church street to Theodore Parker road.

22,193 03	3,370 80	50 19	8,177 69	4,204 20	288 99	7,820 79	4,098 99
12" pipe, sanitary 10" pipe, sanitary 20" and 10" pipe, surface, 20" bipe, surface, Catch-basin drain, 29 manholes, 4 catch-basins.	12" pipe, surface 2 manholes.		10" pipe, sanitary 10" pipe, surface. 10" pipe, surface. Catch-basin drain. 12 manholes. 8 eatch-basins.	15" pipe, sanitary 4 manholes.		20" pipe, surface	12" pipe, surface. 10" pipe, surface. Catche-basin drain. 5 manholes. 10 catch-basins.
2,223.80 1,136.02 948.82 135.11 46	261.41		422.82 395.05 844.83 216	099		496.24 224.54 134.51 377.31	473.20 95.20 169
15, 1927   V. Barletta	Piatelli & Andreasse		Charles Struzziery	Joseph Todecsa		DeCristoforo Brothers Company.	A. Cefalo
15, 1927	11, 1927		25, 1927			16, 1927	1, 1927
	May	:	June	:		June	July
3, 1926 June	22, 1926		17, 1927	11, 1927	:	9, 1927	26, 1927
Dec.	Nov.		May	Oct.		May	May
Vermont street and outlet in private land, Dec. from Caspar street to Vermont street.	Winton street, from 350 feet southeast of Hautevale street extension to about 260 feet southeast.	Montview street, from Carey street to Kirk street.	Roslindale avenue, from Beech street to Dudley avenue.	Woodbrier road, from Centre street to 590 feet southeasterly; private land, Woodbrier road to Wedgemer road; Wedgemer road, from Centre street to 560 feet southeasterly; Centre street, from Dedham line to Grove street; Centre street, from Glendale road to Woodbrier road.	Williams street, from Plainfield street to Forest Hills street.	Eldrige road, from Hyde Park avenue to Patten street; Murray Hill road, from Florence street to Washington street.	Midvale road, from Maple street to Corey street; Stellman road, from Stonybrook to Washington street.

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive.—Continued.

Amount Expended in 1927.	\$5,638 01	1,057 26	3,881 81	10,996 37	9,426 65
Oharacter,	10" pipe, sanitary	10" pipe, sanitary 2 manholes.	10" pipe, sanitary 12" pipe, surface. 6 manholes.	10" pipe, sanitary	10" pipe, sanitary 20" pipe, surface. 20" catch-basin. 16 manholes. 1 catch-basin.
Length. (Feet.)	1,095.54	168.61	883.37 190.59	767.36 734.84 139.40 200.20 192.15 251 264 386.30 130.15	2,440.12 428.33 6
Built by.	A. Cefalo	Zoppo & Civitares	Joseph Todesca	V. Barletta	DeCristoforo Brothers Company,
Finished.	27, 1927	8, 1927	25, 1927	26, 1927	Aug. 15, 1927
Fin	June	June	June	July	
Begun.	28, 1927	18, 1927	24, 1927	8, 1927	25, 1927
	April	May	May	June	June
Госатюм.	West Roxbury.— Continued.  Rossnore road, from Plainfield street to Forest Hills street; Forest Hills street, from Rossnore road to Lotus street.	Private land, outlet from South street; Metropolitan sewer to South street.	Adantis street, from Lasell street to Glenham street; Perham street, from Vermont street to Keith street; Knoll street, from existing sewer to Centre street.	West Border road, from Pelham street to Martin street; West Roxbury Parkway, from Centre street to New York, New Haven & Hartford Railroad; New Park avenue, from West Roxbury Parkway to Been street; Lasale street, from 150 feet east of Caspar street to Newfield street; Sedgewick street, from existing sewer to South street.	Poplar street, from Dale street to Beech street; Bates street, from Beech street to Alphens road; Jeffers street, from Bates street to Alphens road; Mansfeld street, from Jeffers street to Alphens road; Weeks avenue, from Mansfeld street to Alphens road; Alphens road, from Beech street to Bates street.

13,172 41	7,505 05	3,703 29	6,725 50	1,436 05	2,524,48	5,814 02
10" pipe, sanitary. 10" pipe, sanitary. 10" pipe, sanitary. 10" pipe, sanitary. 20" pipe, sanitary. 22" pipe, sanitary. 12" pipe, surface. 12" and 10" pipe, surface. 27 manholes.	12" pipe, surface. 10" pipe, surface. Catch-basin drains. 10 manholes. 5 catch-basins.	10" pipe, sanitary. Catch-basin drains. 8 manholes. 4 catch-basins.	10" pipe, sanitary	10" pipe, sanitary	10" pipe, sanitary	20" pipe, surface. 18" pipe, surface. 15" pipe, surface. 12" pipe, surface. 2 3" concrete conduit. Catch-basin drains. 7 manholes. 7 catch-basins.
598.61 332.20 400.38 399.18 649.79 606.41 330.80	389,53 408.98 54	994.77	562.60 467.65	139.66 124.85 269.85	570.20	292.20 200.30 229.53 114.27 43.12 99
3, 1927   Sept. 16, 1927   A. Cefalo	Joseph Todesea	C. Russo	M. DeSisto Company	A. Grande	C. Russo	A. Grande
16, 1927	27, 1927	2, 1927	20, 1927	27, 1927	1, 1927	30, 1927
Sept.	Oct.	Sept.	Nov.	Oct.	Oct.	Nov.
3, 1927	22, 1927	8, 1927	22, 1927	6, 1927	12, 1927	5, 1927
July	July	Aug.	Aug.	Sept.	Sept.	Oct.
Cedar street, from Washington street to 600 July feet southeast; Ilayes street, from Beech street to 332 feet south; Wolfe street, from Dent street to 400 feet northeast; Summit road, from La Grange street, for 350 feet southwest; Stellman road, from Seeanar road to 192 feet northwest; Seeanar road, from Florence street to Stellman road.	Ohnstead street, from Forest Hills street to Peter Parley road; Park lane and private land, from Ohnstead street to 450 feet casterly.	St. Joseph street extension, from Woodman street to Arborway.	Cottage avenue, from Centre street to a point I,050 feet southeasterly.	Knoll street, from existing sewer to Centre street, St. Peter street, from Boylston street to 360 feet northeasterly.	Ennnons road, from Board of Survey street, No. 644 to West Saville street; West Saville street, from Ennnons road to La Grange street.	Nikisch avenue, from Beech street to West Roxbury Parkway.

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive.— Continued.

Amount Expended in 1927.	\$7,886 55	527 74	2,999 15	1,999 52	2,511 46	2,757 09	1,123 01	8 00
Character.	20" pipe, sanitary. 15" pipe, sanitary. 12" pipe, sanitary. 15 pipe, surface. Catch-basin drains. 10 manholes.		8" pipe, sanitary. 10" pipe, sanitary. 10" pipe, surface. 20" pipe, surface. 10" brook connection. 8 manholes.	10" pipe, sanitary. 10" pipe, sanitary. 10" pipe, sanitary. 4 manholes.	10" pipe, sanitary5 manholes.	10" pipe, sanitary	10" pipe, sanitary 10" pipe, surface 6 manholes.	
Length. (Feet.)	735 212 390 125 32		109.90 314.75 313.15 124.10 8	160.57 109.44 38.25	801.35	599.70	230.55 202.85	
Built by.	Charles Struzziery		M. Guarino	A. Piatelli	John Wilkiams	John Williams	M. Guarino	A. Grande
Finished.			Dec. 1, 1927	Oct. 15, 1927	Nov. 22, 1927	Dec. 20, 1927	Dec. 1, 1927	
Begun,	Oct. 5, 1927		Oct. 11, 1927	Sept. 16, 1927	Nov. 1, 1927.	Nov. 14, 1927	Nov. 15, 1927	Not started
LOCATION.	West Roxbury.—Continued. Stimson street, from Washington: street to Grove street; Grove street, irom Stimson street to Birchwood street; Birchwood street, from Washington street to Grove street.	Potomae street and outlet in Vermont street.	Hodgdon terrace, from Midvale road to 110 feet southeasterly; Pond circle northerly, from Pond street, Guernsey street, from existing conduit to 125 feet easterly.	Hyde Park avenue, from Wyman street to Stony Brook, Lindall street, from Ash- land street to 100 feet northeasterly; Tre- mont street, near Madison avenue, Charlestown.	Ferndale road, from Roslindale Branch Stony Brook to Washington street.	Brook road, from Plainfield street to Forest Hills street.	Zamora court, from Zamora street westerly,	Winchester road, from Centre street to about 600 feet westerly.

*	+			723 86	402 07	140 90	300 08	284 37
10" pipe, sanitary 10" pipe, surface. 12" pipe, surface. 15" pipe, surface. 18" pipe, surface. Catch-basin drain. 48 manholes. 32 catch-basins.	24" pipe, surface	8" pipe, sanitary. 10" pipe, sanitary. 2 manholes.						
1,713 20 1,305 35 1,531 .80 579 .80 246 .70 500	33.50	48.25						
Aug. 15, 1927	May 21, 1927 May 24, 1927 S. J. Tomasello	Private parties.  Private parties.						
Ashland street, from Wood avenue to Wash-   Aug. 15, 1927 ington street.	Linden and Walworth streets	Vale street.	<b>Dorchester.</b>	Regina road, from Washington street to . Alpha road; Danube street, from 320 feet northeast of Dewey street to 215 feet southwest, Mt. Bowdoin terrace, from	290 feet southeast of Eldon street to 201 feet southeasterly.  Walk Hill street, from Fottler road to Wellington Hill footway; Courtland road, from Morton street to Harvard street.	Westmore road, from Deering road to 525 f. feet northwesterly.	Bismarck street, from Oakland street to Messinger street.	Myrtlebank avenue, from Elm avenue to . Richard terrace; Roanoke road, from Kennebee street to Weybosset street; Hyde Park; Dedham street, from Glenwood avenue to 252 feet southwest, Hyde Park.

* Oakland street, Dorchester.

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive. — Continued.

Amount Expended in 1927.	\$2,426 37	749 17	570, 25	2,555 47	91 85	3,193 97	4,820 90
Character.						15" pipe, sanitary	10" pipe, sanitary
Length. (Feet.)						104.12 49.50	607 00 643.33
Built by.						James J. Conway	A. Cefalo
Finished.						April 22, 1927	April 27, 1927
Begun.						March 17, 1927	March 22, 1927
Г.осатюм.	Dorchester.—Continued.  Hollingsworth street, from Randolph road to Oakland street; from Chalma street, from Codman street; from Codman street; of Street, from Codman street; of Street, from Standard street, from Strandard street, from Strandard street, from Strandard street, from Moning street, from Nasham street, from Moning Street, from Nasham street to Lowell street, city proper.	Hillsdale street, from Adams street to 820 feet northwesterly.	Ormond street, from Outlook road to 657 feet north, and northwesterly and outlet in passageway to Goodale road.	Rockdale street, from Randolph road to 656 feet northeast; Duxbury road, from Riverdale road to River street, Hosmer street, from 163 feet northwest of Norfolk street to 225 feet northwest.	Outlook road, from Ormond street to 525 feet northwesterly.	Dorchester avenue, from King street to Cheverus road.	Delmont street, from Adams street to Charlemont street; private land, from Delmont street to Franconia street.

Colorado street, Orlando street and Messin-		:						200 00
ger street.  Milton avenue extension, from Codman Hill avenue to 120 feet northerly; Wilder road, from Normandy street to Blue Hill avenue.	April 15, 1927	15, 1927	May ;	24, 1927	C. Russo	458.78	10" pipe, sanitary	3,874 91
Goodale road, from about 235 feet southeast of Wellington Hill street to 135 feet northwest,	March 2	March 29, 1927	April	14, 1927	James J. Conway	134.10 118	10" pipe, sanitary	898 32
Bushnell street, from Weyanoke street to Van Winkle street; Lenoxdale avenue, from 205 feet southeast of Milton street to 45 feet southeast, Rosemont road, north- cast and southeast, from Adams street to Florida street,	Nov. 2	26, 1926	March 31, 1927	11, 1927	N. DeBartolomeo Company,	205.60	10" pipe, sanitary	1,689 61
Codman street, from Oakridge street to Nevada street; Codman Hill avenue, from Washington street to Milton avenue ex- tension; Milton avenue extension, from Codman street to Codman Lill avenue.								1,207 16
Elene street, from Alabama street to Wabash street, Wabash larteet, from Elene street to Parice street; private land, from Prairie street to Harvard street; Harvard street, from private land to Hazleton street, Hazleton street; Hazleton street; Hazleton street; Westmore road.	Nov.	3, 1926	May	7, 1927	Charles Struzziery	1,546.05 332.40 12 18 305.64 601.45	12" pipe, sanitary	26,389 92
Fuller street, from Washington street to 1,038 feet westerly; Ruskin road, from Blake street to 250 feet northwesterly; Tyler street, from Loring street to 75 feet southeast.	Oct.	4, 1926	May	14, 1927	George J. Regan	422.90	10" pipe, sanitary	11,232 10
Fessenden street, from Norfolk street to Blue Hill avenne; Beacon street, from Milton line to New Bedford street, Hyde Park.	Nov.	12, 1926	Jan.	10, 1927	M. Guarino	7.50	12" pipe, surface	2,144 97

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive.—Continued.

Amount Expended in 1927.	\$4,725 70	6,592 36	5,144 30	95 44	7,810 92
Character,	10" pipe, sanitary. 10" pipe, surface. 5 mankoles.	10" pipe, sanitary 12" pipe, sanitary. 12" pipe, surface. 8 manholes.	10" pipe, sanitary. 15" pipe, surface. 12" pipe, surface. 12 C. I. pipe, surface. 8 manholes.		12" pipe, sanitary. 10" pipe, sanitary. 11 manholes.
Length. (Feet.)	324.96 203.60	139.48 321.20 21	252.16 185.40 74.12 7.50	:	196 10 502 10 575 06 374 76 374 76 209 82 233 84
Built by.	James J. Conway	Day labor	James J. Conway		James J. Conway
Finished.	March 29, 1927	June 9, 1927	Aug. 16, 1927		Sept. 15, 1927
Begun.	Dec. 2, 1926	April 15, 1927	9, 1927		May 18, 1927
LOCATION.	DORCHESTER.—Continued. Goodale road, from 440 feet southeast of Wellington Hill street to 209 feet northwest. Hazelton street, from 170 feet southwest of Wellington Hill footway to 50 feet northwest. Halborn street, from Delhi street to 190 feet southeast; Ruskin road, from Radeliff road to 125 feet northwest.	Southern Artery, from Evans street to Neponset Bridge.	Southern Artery, from Neponset avenue to June about 150 feet southwesterly.	Elm avenue, from Burgoyne street to Adams street.	Norfolk terrace, from Norfolk street to New York, New Haven & Hartford Rail-nord; Ormond street, from Wellington Hill street to existing sewer 242 feet southeast of Byes road; Myrtlebank avenue, from 117 feet northwest of Milton street to 275 feet northwest of Milton street and outlet in Hillsbor road, from Westmore, from existing sewer in Rockway street, from existing sewer in Rockway street for Aristing sewer 172 feet southeasted of Delhi street to 182 feet southeasted of Delhi street to 182 feet southeasterly.

			3,384 67	6,975 90	1,449 95	57,877 22	1,102 98
12" pipe, surface. Catch-basin drains. 3 manholes. 2 catch-basins.	10" pipe, sanitary	10" pipe, sanitary	10" pipe, sanitary	15" pipe, surface. 12" pipe, surface. eatch-basin drains. 11 manholes. 14 catch-basins.	10" pipe, sanitary	10" pipe, sanitary 10" pipe, surface. 12" pipe, surface. 18" pipe, surface. 24" pipe, surface. 24" pipe, surface. 24" pipe, surface. 3 circular concrete surface. 3 circular concrete surface. Catch-basin drains. 25 catch-basins.	10" pipe, sanitary
587.96	563.15	221.10	411,40	195.66 645.76 222	$\frac{322.08}{318.15}$	130.70 1,370.20 482.10 220.10 220.10 257.20 683.90 400	437.60
23, 1927   George J. Regan	George J. Regan	George J. Regan	George J. Regan	Zoppo & Civitares	Charles Struzziery	A. Baruffakti	A. Grande
23, 1927	3, 1927	9, 1927	27, 1927	10, 1927	8, 1927		31, 1927
July	Aug.	Aug.	Sept.	Aug.	Aug.		Aug.
11, 1927   July	21, 1927	3, 1927	9, 1927	18, 1927	28, 1927	15, 1927	Aug. 17, 1927
July	July	Aug.	Aug.	July	July	Aug.	Aug.
Crowell street, from Norfolk street to Evans   July street.	Elm avenue, from Burgoyne street to Wilcox road.	Frontenae street, from Lucerne street to Blue Hill avenue.	Hosmer street, from existing sewer 388 feet, from Norfolk street to about 400 feet northwest.	Mildred avenue, from Babson street to Play- ground and Quincy street, from Warren street, Roxbury to Columbia road, Dor- chester.	Donald road, from Blue Hill avenue to Harvard street.	Oakland street, from Favre street to Wood avenue: Colorado street, from Croydon street from Croydon street. Inace street from Croydon street. Itaaca street for Mahama street. Itaaca street for Fordon street for from Hallowell street to Savannah avenue; piyate land north of Oakland street. Icon Savannah avenue, from 100 feet northeast of Oakland street, from Croydon street to Canaan street; from Croydon street to Canaan street; from Mahama street, from Croydon street to Canaan street; from Mahama street to Livernore street; Ashman street, from Wood avenue to Washington street, from Wood avenue to Washington street, from Wood avenue to Washington street, West Roxbury.*	Hazelton street, from Hillsboro road to about 415 feet southeast.

* See West Roxbury.

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive. — Continued.

Amount Expended in 1927.		\$1,342 72	1,044 28	7,452 83	3,642 85	3,303 61	787 82	1,275 31	2,603 03
Character.		12" pipe, sanitary	12" pipe, sanitary	15" pipe, surface. 12" pipe, surface. Catch-basin drains. 9 manholes. 10 catch-basins.	10" pipe, sanitary. 12" pipe, sanitary. 15" pipe, sanitary. 12" pipe, surface. 9 manholes.	10" pipe, surface	10" pipe, sanitary	12" pipe, sanitary	18" pipe, surface
Length. (Feet.)		258.25	121.50	435.05 935.42 185	713.92 250 63.58 148.20	240 104	128.40	442.02	299
Built by.		Sept. 20, 1927 M. Guarino	A. Grande	C. Russo	George J. Regan	George J. Regan	James J. Conway	A. Daddario	Nov. 12, 1927 John Williams
Finished.		ept. 20, 1927	Sept. 24, 1927	Nov. 14, 1927		Oct. 14, 1927	Oct, 11, 1927	Oct. 15, 1927	lov. 12, 1927
Begun.		Sept. 8, 1927 S	Sept. 15, 1927 S	Sept. 29, 1927 N	Oct. 11, 1927	Sept. 27, 1927 O	Sept. 27, 1927 O	Oct. 3, 1927 O	17, 1927
Госатюм.	DORCHESTER.— Continued.	Gene street, from Humphreys street to Holden street.	Adams street, from existing sewer 18 feet north of Fairview street to 120 feet northerly.	Rockdale street, from Oakland street to Randolph road.	Vera street, from Southern Artery to 280 feet northerly: Southern Artery, from Oakridge street to 80 feet west of Vera street; Druid street, from Morton street to Southern Artery and north in Morton street, from Oakridge street to Druid street.	Winston road, from Lucerne street to Willowwood street.	Ginita street, from existing brick sewer, 20 feet southeast of Centre street to 130 feet southeasterly.	Charlemont street, from Chelmsford street to 425 feet northerly.	Owencroft road, from Southern Artery to Oct. Hurleroft avenue extension.

3,028 86	353 72	844 41	1,212 73	88 992	116 77	150 42	7 50	25	<del></del>	
10" pipe, sanitary 12" pipe surface. 7 manholes.	12" pipe, sanitary	10" pipe, sanitary	10" pipe, sanitary	12" pipe, sanitary	10" pipe, sanitary	10" pipe, sanitary		10" pipe, sanitary. 10" pipe, sanitary. 4 manholes.	Catch-basin drain	12" pipe, sanitary. 10" pipe, sanitary. 12" pipe, sanitary. 10" pipe, sanitary. 12" pipe, sanitary. 12" pipe, sanitary. 12" pipe, sanitary. 10" pipe, sanitary.
629.32 601.35	62	100.15	192.20	131.50	108.40	190		282.02 172.75	92	891.72 106.65 93.60 168.85 520.93 608.97 96.35 308.30
10, 1927   A. Piatelli	M. Guarino	John J. Loonie	Leo J. Nawn, Inc	T, J. O'Connell	M. DeSisto Company	C, Russo	T. J. O'Connell			Private parties
10, 1927		2, 1927	23, 1927	18, 1927	2, 1928		:			
		Nov.	Nov.	Nov.	Jan.			:		
10, 1927 Nov.	1, 1927	24, 1927	11, 1927	2, 1927	22, 1927	19, 1927				
Oct.	Dee.	Oet.	Oct.	Nov.	Dee.	Dee.				
Rangeley street and outlet in private land, from Southern Artery to Milton street.	Southern Artery, south side, from Banerson avenue 90 feet west and 170 feet east; Emerson avenue, from Morton street to Southern Artery.	Newkirk street, from Manley street to 100 feet southwest.	Harvard street, from Hazleton street to 195 feet northeast.	Tuttle street and Savin Hill avenue, from existing manhole 45 feet north of Savin Hillavenue to existing manhole at Mildred street.	Livingstone street, from Ashton street to Lucerne street.	Dyer avenue, from Blue Hill avenue to 335 feet northwest, Harvard street, from 195 feet northeast of Hazleton street to 190 feet northeast.	Davenport Brook, from existing culvert at Southern Artery to about 800 feet west of existing concrete culvert.	Violante street, from River street to 260 feet northeast; Milton street, from Adams street to Milwood street.	Fernald terrace, from Quincy street north- easterly to end,	Alicia road, Bowdoin Green, Cheverus road, Francis park, Grayson street, Owencroft road, Stone terrace, Whitten street.

* See Sunnyside street, Hyde Park.

† See Washington street, eity proper.

# Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive.—Continued.

Amount Expended in 1927.	\$2,110 04	312 76	964 40		1,446 26	7,724 90	1,328 13	42,679 03
Character.				8" pipe, sanitary.		10" pipe, sanitary 8 manholes.	10" pipe, sanitary.	3' circular concrete conduit. 3' 3" circular concrete conduit. 4' circular concrete conduit. 4' gircular concrete conduit. 10" pipe, sanitary. 10" pipe, surface. 11" pipe, surface. 12" pipe, surface. 14" pipe, surface. 24" pipe, surface. 25" pipe, surface. 26" pipe, surface. 26" pipe, surface. 26" pipe, surface. 27" pipe, surface. 28" pipe, surface. 29" pipe, surface. 29" pipe, surface. 20" pipe, surface. 20" pipe, surface. 20" pipe, surface. 26"
Length. (Feet.)				1.50		1,149.14	344	589.37 250 350 50 50 621.52 583 1,019.52 1,262.81 340.98 1,112.85 500
Built by.						A. Grande	Zoppo & Civitaresc	DeCristoforo Brothers Company.
Finished.						July 6, 1927	Aug. 29, 1927	
Begun.						April 22, 1927	Aug. 12, 1927	Aug. 15, 1927
Госатіом.	HYDE PARK.  Ashland street, from Wood avenue to 56 feet northeast of Pleasantyiew street:	Moody street, from Ashland street to Roanoke road. Foster street, from Water street to Loring street.	Vose avenue, from Erie street to Pleasant street; Erie street, from Milton street to Vose avenue; Huntington avenue, from Madison street to Collins street.	Ruskin road, from Radcliffe road 125 feet northwest.	Summer Street Brook, private land, Neponset river to River street near Wood avenue.	Sunnyside street, from Roxanna street to Church street and outleft in Roxanna street, Hyde Park; Violante street, from River street to 260 feet northeast. Dorchester; Milton street, from Adams street to Mil- wood street, Dorchester.	Sunnyside street, from Glenwood avenue to Franklin street.	River street, from Oakland street to Central avenue; Arlington street, from Pierce street is Pierce street, from West street to Arlington street; Blake street, from River street to 390 feet northwest, private land.

959 44	915 14	7 50	136 11	+-		13,515 78	1,090 88	109 65	919 42	240 30	599 25	1,609 65	7 25	+
10" pipe, sanitary	10" pipe, sanitary		10" pipe, sanitary	10" pipe, sanitary		12" pipe, surface. 10" pipe, surface. Catch-basin drains. 1 manhole. 3 catch-basins.						12" pipc, sanitary		24" pipe, sanitary
200.70	193		370	74		64.70 137 112						166.80		55.50
29, 1927   Ormac Company	John J. Loonie	John Williams	L, Balboni	Leo J. Nawn, Inc		T. J. O'Connell						A. Cellucci	Not built	F. E. Bowes
29, 1927	9, 1927	:	:	6, 1927		25, 1927						9, 1927	•	30, 1927
Aug.	Sept.			June		April						June		Sept.
15, 1927 Aug.	12, 1927		12, 1927	1, 1927		5, 1926						22, 1927		20, 1927
Aug.	Aug.		Ďee.	June.		Oct.	:					April	:	Sept.
Durant road, from Sunnyside street 200 feet northwest.	Shirley road, from Sunnyside street 200 feet northwest.	River street, from Perkins avenue to Cleveland street and outlet in Barry street,	Reservoir street, from Milton avenue to 355 feet casterly.	Prescott street, 202 feet northeast of Haw-thorne street.	Roxbury.	Beacon street at Brookline avenue; Beacon street at Charlesgate East and West; A street at Richards street, South Boston: Arlington street, from Columbus avenue to St. James avenue; to St. James avenue; from Church street to St. James avenue.	Dennison street, from Walnut avenue to 627 feet northwesterly.	Sunnyside street, from Creighton street to Westerly street.	Dana street, from Dudley street to Cliff street.	Leon street, from Greenleaf street to 375 feet southerly.	Spring court, from Fellows street to 180 feet southeasterly.	Maple street, from Cheney street to 140 feet southerly.	Creighton street, near Day street; Dudley street, from Harrison avenue to Blue Hill avenue; Warren street, from Quincy street to Blue Hill avenue.	Island street at Gerard street

* See Dorchester.

Sewerage Works, Construction, January 1, 1927, to December 31, 1927, Inclusive. — Concluded.

Amount Expended in 1927.	\$952.58	3,483 03	4,878 11	803 78	5,600_26	tary 3,450 93	*		92 028
Character,	12", pipe, surface	10° ppe, santary. 1 manhole. 5 manholes	Catch-basin drains 9 manholes.	12" pipe, sanitary	24" pipe, surface 18" pipe, surface. 15" pipe, surface. 12" pipe, surface. Catch-basin drains.	5 mannores. 6 by 6' 6'' concrete sanitary 3 manholes.	12" pipe, sanitary 1 manhole.	Catob basine	
Length. (Feet.)	194.70	200.48	258	130.90	461.92 26.80 35 59.50	75	41.50		
Built by	A. Piatelli	S. J. Tomascllo	C. Russo	M. DeSisto Company	L. Balboni	A. D. Daddario	Day labor		
Finished.	Sept. 9, 1927	July 16, 1927	Sept. 13, 1927	Sept. 24, 1927	Oct. 24, 1927		an. 15, 1927		
Begun,	Aug. 8, 1927 S	June 27, 1927 J	Aug. 17, 1927 S	Sept. 19, 1927	Sept. 12, 1927	Nov. 10, 1927	Dec. 13, 1926 Jan.		
Г.ослиом.	ROXBURY.— Continued. Chency street, from Hartwell street to 200 An	Harrison avenue to	Brookline avenue, from Fenway to Brook-line town line.	Bowditch court, from Warren street to about 165 feet westerly.	Harold street, from Walnut avenue to Howland street.	Hampden street, from Albany street to a No point about 100 feet southerly.	Bowditch court,	Слту Рворев.	Liberty square and Batterymarch street

476 24	1,960 51	12,361 26	10,283 46	3,803 98	4,943 71	
		24" pipe, sanitary. 30" pipe, sanitary. 15" pipe, sanitary. 15" pipe, sanitary. 18" pipe, sanitary. Catch-basin drains. 12 manholes. 9 catch-basins.	15" pipe, sanitary Catch-basin drains, 10 manholes. 16 catch-basins,	15" pipe, sanitary	Catch-basin drains	12" pipe, sanitary. 3 manholes.
		$\begin{array}{c} 10 \\ 25 \\ 101.95 \\ 145.45 \\ 155.20 \\ 224 \end{array}$	550.55 288.50	156.60	164.50	183.72
		C. & R. Construction Company.	13, 1927 Zoppo & Civitarese	N. DiBartolomeo Company,	M. DeSisto Company	Water service
		9, 1927	13, 1927	5, 1927	Nov. 23, 1927	
:		June	Oct.	Oct.	Nov.	
		18, 1927	30, 1927	23, 1927	Sept. 27, 1927	
:	:	April	Aug.	Aug.		:
Parkman street, from North Anderson street to Blossom street.	Public Alley, No. 554, from Appleton street to Chandler street; Appleton street, from Tremont street to Public Alley No. 554.	Faneuil Hall square, Dock square and Union April 18, 1927 street.	Kneeland street, from Atlantie avenue to Aug. Washington street.	Piedmont street, from Church street to Aug. Arlington street.	Washington street, from Dover street to Massachusetts avenne: Marginal street, about 400 feet west of Jeffries street, East Boston; East Broadway, from L street to farragut road, South Boston; Fernald terrace, from Quincy street northeasterly to end, Dorchester.	Arlington street, from Columbus avenue to Fayette street.

* Cost included in new catch-basins.

### Recapitulation.

Districts.	Linear Feet Sewers.	Linear Feet Catch-basins Drain.	Manholes.	Catch-basins.	Amount Expended in 1927.
South Boston	439.52	552	8	30	\$12,325 62
East Boston	403.10	34	2	2	406,84
Charlestown	38.25		1	_	_
Brighton	8,611.03	543	63	41	66,565 24
West Roxbury	40,818.35	1,570	292	96	251,226 45
Dorchester	23,093.76	1,169	186	69	192,243 73
Hyde Park	10,828.67	500	85	48	58,583 71
Roxbury	1,649.80	425	26	25	37,260 87
City proper	1,489.18	677	31	30	34,492 36

### Length of Sewers Built by Private Parties.

District.	Linear Feet Sewers.	Manholes.
South Boston	186 72	_
Brighton	$1,\!356.54$	9
West Roxbury	151.39	2
Dorchester	2,795.37	_

### New Catch-basins and Manholes Built by Day Labor and Contract January 1, 1927, to December 31, 1927, Inclusive.

District.	Catch-basins.	Manholes.	Total Cost.
South Boston	25	3	\$11,358 53
East Boston	7	10	6,799 48
Charlestown	11	2	2,037 21
Brighton	5	6	4,061 58
West Roxbury	19	8	11,405 12
Dorchester	53	5	25,551 09
Hyde Park	9	_	4,939 17
Roxbury	41	10	27,714 44
City proper	66	16	39,547 54
Totals	236	60	\$133,414 16

SE	WER	AGE	Wor	ks :	Loan	, 19	27.			
Engineers' salar Amount charge					of sev	vers			\$106,737 25,309	94 00
									\$132,046	94
	E	Engi	NEER	ING	Exp	ENSE				
Labor									\$5,126	21
Labor Teaming .									336	
Borings .									1,884	
Transportation									2,874	20
Supplies, etc.									4,840	68
									\$15,062	02
P	UMPI	NG S	STATI	ON	Cons	TRUC	TIO	٧.		
									\$44	00
Labor									300	
Contracts .									48,401	84
Contracts . Materials, etc									935	00
									\$49,680	84
			Su	NDRI	ES.					
Labor Materials .									\$1,776	67
Materials .									46,312	63
Miscellaneous									127	07
									\$48,216	27
Less material ch	a roe	d to	iohe						41,773	<i>4</i> ∩
Less majeriai en	arge	a to	Jous	•	•		•	•	11,770	-10
									\$6,442	97
Court Execut	IONS					n A	ссот	INT	OF LAN	D-
			ľAKI	NGS,	ETC.					
George E. Went Neponset rive Boston Catholic	r, Hy c Ce	$\det_{ ext{mete}}$	Park ery A	$\dot{\Lambda}_{ m SSO}$	ciatio	n, p	riva	te	\$237	87
land between	Harv	vard	and	Per	ry sti	reets	, Do	r-	~~~	0.0
chester .	1.1	. 1		·	1	•			500	
L. H. Morrell, C									75	
Anna L. Cassabo									100	
Margaret Welsh							· Ha		87	93
Mary Agnes Me vard street an									25	00
Carried foru	vard								\$1,025	40

Brought forward	\$ 1,025 40
chester	17 20
—— McNally, Faneuil street, Brighton	45 00
Joseph M. Conry, Rockwood street, West	
Roxbury	701 40
Katherine McNutty, Faneuil street, Brighton .	200 00
V. Barletta, Oswego street overflow (contract)	5,000 00
Edward J. and Elizabeth Soderlund, private land	3,000
off Winter street, West Roxbury	100 00
H. C. Corbin, Itasca street, Dorchester	300 00
Laura Gould, Itasca street, Dorchester	45 00
Entitle Gottle, Hasta Street, Dorollestor	
	\$7,434 00
•	φ,,101 00
East Boston Pumping Station and Ou	TLET.
Engineers' salaries	\$1,867 06
Borings	179 17
Advertising	37 38
	\$2,083 61
	# <b>-</b> ,000

# Summary of Sewer Construction for Twelve Months Ended December 31, 1927.

District.	Built by City by Contract or Day Labor.	Built by Private Parties.	Total Ler	ngth Built.
	Linear Feet.	Linear Feet.	Linear Feet.	Miles.
City proper	1,305.46	183.72	1,489.18	0.282
Roxbury	1,649.80		1,649.80	0.312
South Boston	439.52	186.72	626.24	0.119
East Boston	226.00	177.00	403.00	0.076
Charlestown	38.25		38.25	0.007
Brighton	8,600.86	1,356.54	9,957.40	1.886
West Roxbury	40,738.80	151.39	40,890.19	7.744
Dorchester	23,371.78	9,643.87	33,015.65	6.253
Hyde Park	10,828.67		10,828.67	2.051
Totals	87,199.14	11,699.24	98,898.38	18.730

# Net Increase in Length of Sewers Between January 1, 1927, and December 31, 1927.

District.	Length of Sewers Built During the Twelve Months Ended December 31, 1927.	Length of Sewers Re- built or Abandoned During the Twelve Months. Ended December 31, 1927.	Twelve Mo	rease for onths Ended r 31, 1927.
	Linear Feet.	Linear Feet.	Linear Feet.	Miles.
City proper	1,489.18	456.31	1,032.87	0.196
Roxbury	1,649.80	7.00	1,642.80	0.310
South Boston	626.24		626.24	0.119
East Boston	403.00	226.00	177.00	0.034
Charlestown	38.25		38.25	0.007
Brighton	9,957.40	761.88	9,195.52	1.741
West Roxbury	40,890.19	40.85	40,849.34	7.737
Dorchester	33,015.65	951.58	32,064.07	6.073
Hyde Park	10,828.67		10,828.67	2.051
Totals	98,898.38	2,443.62	96,454.76	18.268
Total	Length of Sew	ers.		Miles.
Common sewers and surface drai	27	1,010.32		
Net increase of common sewers an and December 31, 1927	18.27			
Total common sewers and s	1, 1927	1,028.59		
Intercepting sewers connecting w	December 31,	* 6.81		
Boston main drainage interceptin	27	* 24.12		
Grand total of common and	intercepting se	wers to Decen	nber 31, 1927,	1,059.52
Total mileage of streets conta	ining sewerage	works to Dece	mber 31, 1927,	619.90

^{*} No additional lengths during the year 1927.

# Summary of Sewer Construction for Five Years Previous to December 31, 1927.

	1923.	1924.	1925.*	1926.	1927.
	Linear Feet.	Linear Feet.	Linear Feet.	Linear Feet.	Linear Feet.
Built by city by contract or day labor	41,076.39	50,708.89	75,241.99	72,958.49	87,199.14
Built by private parties	2,609.10	4,566.88	10,296.40	4,009.55	11,699.24
Totals	43,685.49	55,275.77	85,538.39	76,968.04	98,898.38

^{*} Fiscal year changed to end December 31. Data is for eleven (11) months only.

### Catch=basins in Charge of Sewer Division.

		ASIN DATA FOR NDED DECEMBE		Total for Whole City in Charge of Sewer Division.		
Districts.	Number Built or Rebuilt.	Number Abandoned or Removed.	Net Increase.	Previous Report to January 1, 1927.	Grand Total to January 1, 1928.	
City proper	101	80	21	3,402	3,423	
Roxbury	69	25	44	3,012	3,056	
South Boston	53	13	40	1,281	1,321	
East Boston	9		9	925	934	
Charlestown	11		11	775	786	
Brighton	46		46	1,457	1,503	
West Roxbury	116	2	114	2,404	2,518	
Dorchester	220	8	212	3,777	3,989	
Hyde Park	57	8	49	410	459	
Totals	682	136	546	17,443	17,989	

Table of Approximate Quantities, Lifts and Duties at Calf Pasture Pumping Station, from January 1, 1927, to December 31, 1927, Inclusive.

	Total	Average	Minimum	Maximum	Average	AVERAG	AVERAGE DAILY DUTY IN MILLION FOOT-POUNDS.	UTY IN UNDB.
Момтн.	Gallons Pumped.	per Day Gallons.	per Day Gallons,	per Day Gallons.	Lift, Feet.	Per 100 Pounds Coal.	Per Gallon Oil.	Per Kilowatt Hour.
January	3,878,871,216	123,125,590	112,895,784	149,509,576	35.4		0.9	2.6
February	3,687,662,910	131,702,245	118,790,540	130,437,932	35.4		5.8	2.0
March	3,798,278,372	122,234,786	120,001,404	155,346,624	35.4		5.6	2.5
April	3,234,545,292	107,818,176	99,164,372	141,392,495	35.4	57.5		1.7
May	3,654,263,294	117,879,461	95,103,240	145,636,436	35.4	56.2		2.2
June	3,450,679,324	115,022,644	119,597,308	149,805,236	35.4	52.5		2.2
July	3,605,967,062	116,321,518	94,494,844	142,914,936	35.4	53.5		1.9
August	4,081,863,910	131,672,237	90,435,384	159,282,720	35.4	50.8		2.1
September	4,457,070,888	143,776,480	120,736,520	173,615,392	35.4	47.0	:	2.2
October	3,824,157,507	123,359,920	74,578,773	169,428,301	35.4	54.0	7.4	2.1
November	3,431,502,523	114,383,417	91,043,172	125,442,730	35.4		8.9	1.7
December	3,664,678,295	118,215,429	83,796,335	123,442,730	35.4	:	7.0	2.7
Totals	44,760,560,593	1,467,511,903				371.5	38.6	25.6
Averages	123,631,673	122,292,654				53.1	6.4	2.1

Note.—11,736,629,330 gallons pumped by coal; 3,222 tons used.
13,116,568,263 gallons pumped by oil; 598,616 gallons used.
19,907,423,000 gallons pumped by eletric power; 2,882,900 K. W. hours,

44,760,560,593

Cost of Pumping at Calf Pasture Pumping Station January 1, 1927, to December 31, 1927, Inclusive.

Items.	Cost.	Cost per Million Foot Gallons.
Labor	\$87,987 50	\$0.05553
Fuel oil	26,764 95	.01689
Electric power	44,552 26	.02812
Coal	23,940 38	.01511
Oils and waste	1,829 94	.00115
Rubber valves and packing	2,123 67	.00135
Miscellaneous supplies and renewals	11,614 42	.00733
Cleaning No. 1 and No. 2 wells	7,020 00	.00443
Major repairs on No. 5 engine	33,720 48	.02128
Totals	\$239,553 60	\$0.15119
Labor at screens	8,138 00	.00513

Sludge Deposited and Removed from Deposit Sewers at Calf Pasture Pumping Station from January 1, 1927, to December 31, 1927, Inclusive.

	North Sewer Cubic Yards.	South Sewer Cubic Yards.	Total, Cubic Yards.
Sludge in sewers on January 1, 1927	1,295	897	2,192
Sludge deposited during the year 1927	782	308	1,090
Totals	2,077	1,205	3,282
Sludge removed during year 1927	1,624	729	2,353
Sludge in sewers on January 1, 1928	453	476	929

Amount of Refuse Removed from Screen Hoist at Calf Pasture Pumping Station, January 1, 1927, to December 31, 1927, Inclusive.

Month.	Number Cheeses.	Weight (Pounds.
January February March April May June July August September October November December	145 136 128 154 142 118 123 89 83 137 127 138	34,945 32,776 30,848 37,114 34,222 28,438 29,643 21,449 20,003 33,017 30,607 33,258
Totals	1,520	36

Cheeses average 241 pounds.

# APPENDIX F.

# REPORT OF THE DIVISION ENGINEER OF THE WATER DIVISION.

Boston January, 1, 1928.

To the Commissioner of Public Works:

The following report of the operation, income and expenditures of the Water Division for the year ending

December 31, 1927, is respectfully submitted.

During the year building construction and continued property development, principally in Dorchester and West Roxbury, called for the laying of 9.63 miles of 6-inch to 16-inch water pipe; 3.3 miles were laid in Dorchester, 3.8 miles in West Roxbury and one mile in Hyde Park. A contract for laying 4,000 linear feet of 48-inch water pipe in Charles street, Columbus avenue and Arlington street, awarded in October 1926, and on which work had ceased at the end of the working season in 1926, was completed during the year by the laying of 2,700 linear feet of 48-inch pipe with the exception of the installation of the steel pipe in the tunnel under the railroad tracks at Arlington square. This supply main was occasioned by the abandonment of the two 30-inch water mains in Tremont street, between Appleton and Boylston streets, as a consequence of the Tremont street widening, which necessitated the removal of the older mains formerly carried over the New York, New Haven & Hartford Railroad and the Boston & Albany Railroad tracks by an independent pipe bridge. The unsatisfactory location of the water mains in Tremont street, between Warrenton and Stuart streets was also a factor in selecting a new location for the new water main to replace these mains to be abandoned. The construction of the reinforced concrete tunnel 8 feet 6 inches in diameter with steel pipe shafts 10 feet in diameter, the tunnel depth under the railroad tracks being 40 feet below said tracks and in which the 48-inch main will be laid, was not completed until December 1.

although work started in February, consequently the laying of the water pipe in the tunnel which completes the work under contract could not be finished. Early in the coming spring the 48-inch supply main replacing the 30-inch mains mentioned above will be in service.

The construction of the Southern Artery by the Commonwealth of Massachusetts, presented the opportunity to complete the 24-inch supply main strengthening the distribution system of Neponset and the southern section of Dorchester, and 3,100 linear feet of 24-inch pipe was laid in the Artery connecting the 24-inch main ending at Adams street and Minot street with the 36-inch main running through Washington street, Dorchester. The Dock square widening allowed the relaying of 750 linear feet of the old 24-inch main laid in 1849, with new cast-iron 24-inch pipe. The old pipe showed a serious state of deterioration after being buried in the salt marsh soil for eighty years.

The demand for pipe extensions prevented the relaying of small sized water pipes with larger sizes to the amount of the yearly program of about 5 miles. During the year only 13,960 linear feet or 2.6 miles of 4-inch and 6-inch pipe was relaid with 8-inch and 12-inch pipe for the purpose of improving the fire protection and furnishing the quantity of water demanded by the

modern type of fire engines.

Among the greater lengths relaid were:

### SOUTH BOSTON.

D street, between Bells court and Second streets, 2,269 linear feet of 12 inch relaid with 12-inch pipe. This pipe was laid in 1849 and at points was 9 feet deep.

# CITY PROPER.

Mason street, between West and Avery streets, 257 linear feet of 6-inch relaid with 12-inch pipe.

Grenville place, off Columbus avenue, 140 linear feet

of 6-inch relaid with 12-inch pipe.

Warrenton street, between Tremont and Stuart streets, 508 linear feet of 6-inch relaid with 12-inch pipe.

### DORCHESTER.

Glide street, between Oak avenue and Minot street, 302 linear feet of 6-inch relaid with 8-inch pipe.

Southern Artery, between Grayson street and Cushing Hill road, 729 linear feet of 8-inch relaid with 12-inch pipe.

### HYDE PARK.

Arlington street, between Providence street and Hyde Park avenue, 419 linear feet of 4-inch relaid with 8-inch pipe.

Metropolitan avenue, between River and Westminster streets, 1,225 linear feet of 6-inch relaid with 12-inch

pipe.

Glenwood avenue, between Beaver and Child streets,

230 linear feet of 6-inch relaid with 12-inch pipe.

Cleveland street, between Child and Beaver streets,

330 linear feet of 6-inch relaid with 12-inch pipe.

Sunnyside street, between Franklin and Church streets, 938 linear feet of 4-inch relaid with 12-inch pipe.

Thompson street, between Glenwood and Franklin streets, 520 linear feet of 4-inch relaid with 12-inch pipe.

Franklin street, between Thompson street and Sunnyside, 361 linear feet of 4-inch relaid with 12-inch pipe.

The construction of the Southern Artery, River street, etc., in consequence of the drastic grade changes called for the lowering, raising and relocating of 7,150 linear feet of 6-inch, 8-inch and 12-inch pipes.

Twenty-eight contracts were awarded at various times during the year to care for the applications for

main pipe extension as received.

Service pipes to the number of 2,228, varying in size from  $\frac{5}{8}$ -inch to 12-inch were installed during the year and of this number 118 were 4-inch pipes laid to provide

sprinkler protection.

The regular work of the Distribution Branch, consisting of leaks, repairs, establishing fire and service pipes, freeing stoppage, shutting off and letting on water, etc., was performed in such a manner and at such times as to provide a minimum of delay and discomfort to applications for water, to water takers and to the traveling public; practically all our work in the business section is now done on Sundays to meet the above conditions.

The Legislative Acts of 1907, were complied with and 521 meters were set on old services in existence previous to 1907, and 1,940 meters were set on new services, a total of 2,461 meters. On December 31, 1927, the

total number of meters in service was 93,857, and there remains to meter about 1,000 miscellaneous houses in various sections of the city. With 99 per cent of Boston metered, the work performed by the Meter Branch has increased and 8,784 meters have been changed and reset and 2,319 meters have been repaired in service, in addition to the installations on new and old services.

The collections for all purposes in the Water Division were \$4,080,772.65 and the statute making water bills a lien on real estate is an important factor in having the

bills paid and paid promptly.

Respectfully submitted,

C. J. Carven, Division Engineer.

# FINANCIAL STATEMENT.

FINANCIA	AL	ота	I IM	EE/IN I	١.			
]	Reci	EIPTS						
0.1 ( )							\$3,913,117	06
		:					107,146	28
Fire motor and elevator pipes no	ew a	nd re	pairs				31.566	11
Sales of merchandise Fees for summonses			٠.				7 257	08
Fees for summonses							7,157 3,737	13
Labor and materials for miscella	neou	ıs .					3,737	13
Damages and repairs to hydrant	s.						3,100	35
Shutting off and letting on water	r.						2,734	00
Interest on bank deposits .							2,321	
Interest on bank deposits Premium on water loans Reard of horses							1,094	
Board of horses Interest on water loans Testing water meters Delivering water Rent of conduit, Congress street							546	
Interest on water loans							447	
Testing water meters							288	
Delivering water							139	
Rent of conduit, Congress street							100	
Sales of old materials Penalty on coal							20	00
Penalty on coal								20
Gross income							\$4,080,772	65
Transferred to City Loan acco	unt	to p	oay					
Hyde Park Water Debt .				\$16,	000	00		
Transferred to appropriation	$\mathbf{for}$	Serv	rice					
Mains and Relaying Mains				90,	000	00		
Transferred to credit of Collect	$_{ m ing}$	Deps						
ment				53,	356	03		
							159,356	03
Net income							\$3,921,416	62
Net income Balance January 1, 1927 .							27,914	62
							\$3,949,331	24
Ex	PENI	ITUR	ES.					
Current expenses and extensions			<b>@</b> 1	1488	018	23		
Interest on water loans	•	•	. Ф.	1,400, 50	040	00		
Sorial loans	•	•	•	200	940	00		
Interest on water loans Serial loans	•	•	•	200,	052	80		
Metropolitan water aggegen ent	•	•	. 9	155	188	41		
metropontan water assessment	•	•	• -	.,100,	100			
Total armonditumes 1097							3,892,199	11
Total expenditures 1927.	•	•	•	•	•	•	5,692,199	44
D 1 D 1 01 100W							@FF 191	00
Balance December 31, 1927		•	•	•	٠	٠	\$57,131	80
Appropriation for Servi	CE	MAI	NS A	ND I	RELA	YIN	G MAINS.	
Balance unexpended January 1,		,					\$7,864	00
Dalance unexpended January 1.						_	m 4.004	
Appropriation from Water Incom	1927	1077 1	027	•	•	•	00,000	00
Appropriation from Water Incom	1927 ne M	lay 1	927	÷			90,000	00
Appropriation from Water Incon	1927 ne M	lay 1	927				90,000	00
Appropriation from Water Incon Total appropriation 1927	ne M	lay 1					90,000 \$97,864	99
Appropriation from Water Incon	ne M	lay 1		:			90,000	99
Appropriation from Water Incon Total appropriation 1927	ne M	lay 1 7 :	:	:	: :		90,000 \$97,864	99

APPROPRIATION FOR EXTENSION	OF	WAT	ER	Mai	NS	(Loan).	
Balance unexpended January 1, 1927 . Loan issued in 1927						\$238,566 200,000	
Total appropriations 1927 Expended during fiscal year 1927 .						\$438,566 282,524	12 21
Balance unexpended December 31,	1927	7				\$156,041	91
Appropriation for Laying and Ri (Loan)		ING	ST	REET	W	ATER MA	INS
Balance unexpended January, 1 1927 . Expended during fiscal year 1927						\$19,824 13,244	
Balance unexpended December 31,	192	7				\$6,580	18

Details of expenditures under appropriation for current expenses for the fiscal year 1927.

		Extensio	N.				
Construction of new mains Replacement of old mains New hydrants				\$163,117	25		
Replacement of old mains				53,601	12		
New hydrants				7,213	75		
Total extension						\$223,932	12
	7.1	AINTENAN	CE				
Office and Engineering Prop			CE.				
Office and Engineering Bran	icn.	\$48,419	91				
Salaries and wages	•	864	57				
			0,				
postage		3.743	13				
Printing, stationery a postage		804	86				
				\$53,831	77		
Income Branch:				,			
Salaries and wages .		\$149,127	30				
Traveling expenses .		2,196	06				
Salaries and wages Traveling expenses Printing, stationery a	ınd	1 100					
postage		4,498	53				
Miscellaneous		2,257	01	150.050	00		
Distribution Branch:				158,078	90		
Salaries and Wages		\$49,091	45				
Traveling expenses	•	403	18				
Salaries and Wages Traveling expenses Printing, stationery	ınd	409	10				
postage	uncı	1.092	73				
postage	:	2,555	06				
				46,972	42		
Meter Branch:				,			
Salaries and wages .		\$18,038	25				
Traveling expenses .		41	76				
Salaries and wages Traveling expenses New meters and setting		28,424	52				
Meters, repairing, resetti	ng,						
testing, etc.	,	53,591	94				
Printing, stationery a	ind	202	1.0				
postage		303	10				
Carried forward		\$100,399	63	\$258,883	09	\$223,932	12

Brought forward Holiday Shops Laborers' Vacations Miscellaneous  Inspection of castings Yards Damages Shops Stables Tools and repairs Main pipe relocation Maine pipe repairs Service pipes, new Service pipes, changes Service pipes, repairs Hydrant, changes Hydrant, repairs Water posts, changes Water posts, changes Water posts, repairs Fountains, new Fountains, new Fountains, on account of icholiday Investigations Off and on water Accommodation work Work on account of office branch				
Brought forward .		\$100,399 63	\$258,883 09	\$223,932 12
Holiday		5,216 57	, ",	,
Shops		18,087 83		
Laborers' Vacations .		853 11		
Miscellaneous		170 42	}	
			124,727 56	
Inspection of castings .			7,821 70	
Yards			95,094 56	
Damages			22,038 13	
Shops			26,000 21	
Stables			6,524 65	
Tools and repairs			15,018 51	
Main pipe relocation .			15,737 14	
Maine pipe repairs			88,509 88	
Service pipes, new			114,176 53	
Service pipes, changes .			14,023 87	•
Service pipes, repairs .			128,279 06	
Hydrant, changes			34,296 77	
Hydrant, repairs			70,106 85	
Water posts, changes .			320 97	
Water posts, repairs .			963 50	
Fountains, new			256 57	
Fountains, changes			540 73	
Fountains, repairs			2,584 37	
Fountains, on account of ic	e .		1,784 40	
Holiday			61,957 54	
Investigations			1,481 20	
Off and on water			19,819 36	
Accommodation work			4.254 18	
Work on account of office	e and	d engineer's	-,	
branch			2.910 01	
Work on account of Income	e Bra	nch	783 18	
Work on account of new me	eters		4.351 37	
Work on account of meter i	renair	rs	11.128 29	
Work on account of Meter	Bran	ch .	1,419 26	
Waste detection and preven	ntion		110 10	
Launch repairs and supplie	8 .		1.088 30	
Harbor Service			3.769 03	
Veterans' pensions	•		6.633 41	
Laborers' pensions	•		8.644 20	
Laborers' vacations	•		21.282.86	
Workman's Companyation	•		4 477 05	
Emergency service	•		67.898.77	
Garage	•		6.763 09	
Medical inspection	•		600.00	
Light and power	•		1.721 17	
High Pressure Fire Service	•		3,136 20	
Votorinary's services	•		125 00	
Regulating hoves	•		6.357 26	
Expert services			1 106 90	
Tayor	•		280 05	
Delivering water	•		9 95	
Automobiles	•		50 403 49	
Automobiles	•		00,100 10	
Off and on water Accommodation work Work on account of office branch Work on account of Income Work on account of new me Work on account of Meter Waste detection and prever Launch, repairs and supplic Harbor Service Veterans' pensions Laborers' pensions Laborers' vacations Workmen's Compensation Emergency service Garage Medical inspection Light and power High Pressure Fire Service Veterinary's services Regulating boxes Expert services Taxes Delivering water Automobiles  Total maintenance Merchanise sold and stock Stock purchased				1.320.200 27
Merchanise sold and stock	cons	igned to jur	ık	6, 135, 34
Stock purchased	Cons	-grice to jui		320,774 70
				\$1,871,042 43
Less stock used and dispose	ed of			388,024 20
Less stock used and dispose	ot or			000,021 20
Total expenditures fr	om s	npropriatio	n for current	
expenses	JIII č	ъргорнало	i for enfelle	\$1.483.018 23
capenaca				#1,100,010 <b>20</b>

### Receipts and Expenditures, 1918-1927.

### Receipts.

	1918-19.	1919-20.	1920-21.	1921–22.	1922-23.	1923-24.	1924-25.	1925. (11 months.)	1926.	1927.
Sales of water	\$2,998,922 73	\$3,244,542 57	\$3,364,937 04	\$3,407,579 24	\$3,694,448 30	\$3,813,571 42	\$3,748,575 28	\$3,079,830 74	\$3,790,408 27	\$3,913,117 06
Other receipts	50,529 81	54,111 33	64,598 71	65,479 69	97,499 70	97,164 30	182,317 83	161,277 84	210,580 90	167,655 59
	\$3,049,452 54	\$3,298,653 90	\$3,429,535 75	\$3,473,058 93	\$3,791,948 00	\$3,910,735 72	\$3,930,893 11	\$3,241,108 58	\$4,000,989 17	\$4,080,772 65
Loan, extension of water mains								800,000 00	300,000 00	200,000 00
Loan, laying and relaying street water mains								100,000 00		
	\$3,049,452 45	\$3,298,653 90	\$3,429,535 75	\$3,473,058 93	\$3,791,948 00	\$3,910,735 72	\$3,930,893 11	\$4,141,108 58	\$4,300,989 17	\$4,280,772 65
Balance, beginning of year	\$25,087 31	* \$3,487 83			* \$43,733 95	*\$200,000 00	\$24,141 18	\$26,737 35	\$375,840 01	\$294,170 57
Balance, end of year	*3,487 83			\$43,733 95		24,141 18	26,737 35	† 375,840 01	† 294,170 57	246,022 89
Transferred to Collecting Department	26,165 88	30,317 74	\$33,570 54	34,596 76	46,425 42	50,522 49	58,653 86	51,890 79	55,622 61	53,356 03
Transferred to city loan account	124,263 90	390,095 22	209,958 26	161,000 00	250,233 01	113,570 40	16,000 00	10,000 00	16,000 00	16,000 00
Transferred to appropriation for service mains and relaying mains	30,000 00				200,000 00	208,180 00	217,638 84	50,123 45	90,000 00	90,000 00
Transferred to appropriation for High Pressure Fire Service					23,000 00					
Transferred to appropriation for High Pressure Fire system extension					100,000 00	410,000 00	175,000 00			

### Expenditures.

	1918–19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924–25.	1925. (11 months.)	1926.	1927.
Current expenses	\$1,055,842 87	\$1,010,634 32	‡ <b>\$1,253,166</b> 33	‡\$1,232,418 <b>7</b> 6	‡\$1,396,212 50	\$1,229,573 73	\$1,608,320 10	\$1,309,163 72	\$1,511,407 58	\$1,483,008 23
Service mains and relaying mains	51,599 48	3,487 83	<b></b>			384,038 82	215,042 67	75,930 69	83,065 12	71,595 99
Metropolitan water assessment	1,741,008 84	1,805,104 07	1,885,924 91	1,958,528 33	1,784,257 21	1,872,413 17	1,829,973 63	1,793,425 93	2,090,598 07	2,155,188 41
Interest	71,268 00	61,162 73	45,874 33	41,852 66	34,449 49	25,534 00	24,680 00	9,800 00	45,280 00	52,940 00
Refunded water rates	962 99	1,339 82	1,041 38	928 47	1,104 32	941 93	626 68	527 48	343 50	1,052 80
Loan, extension of water mains								515,178 10	346,255 78	282,524 21
Loan, laying and relaying street water mains								26,089 21	54,085 95	13,244 66
On account of serial loans									180,000 00	200,000 00
	\$2,929,682 18	\$2,881,728 77	\$3,186,006 95	\$3,233,728 22	\$3,216,023 52	\$3,512,501 65	\$3,678,643 08	<b>\$</b> 3,730,115 13	\$4,311,036 00	\$4,259,564 30

^{*}Balance of appropriation for service mains and relaying mains.

*\$57,131.80 of this amount is halance of appropriation for "Water Service"; \$26,269 of this amount is balance of appropriation for "Service Mains and Relaying Mains Revenue"; \$156,041.91 of this amount is balance of appropriation for "Extension of Water Mains (Loan)." \$6,580.18 of this amount is balance of appropriation for "Laying and Relaying Street Water Mains (Loan)."

‡Amount expended for current expenses and extensions, there being one appropriation only.



Details of expenditures under appropriation for Service Mains and Relaying Mains for the fiscal year 1927.

100 Mains and recity	8 -		.110	101	0110 110		, 0001 10211
	165	TEN	2103				
Construction of new mains	13.	LILL	oron	•	\$37,377	90	
Construction of new mains Replacement of old mains	•		•	•			
Replacement of old mains			•		22,486	90	
							050 001 40
Total extension		•	•				\$59,864 48
	31.						
	MAI	NTE:	XAXC	'E.	2014	<b>~</b> 0	
Main pipe, relocation .					\$314		
Main pipe, repairs			٠		599 9,732	29	
Service pipes, new					9,732	90	
Service pipes, changes .					950	50	
Service pipes, repairs .					950	38	
Hydrant repairs					51	96	
Main pipe, relocation Main pipe, repairs Service pipes, new Service pipes, changes Service pipes, repairs Hydrant repairs Off and on water					39	96	
							11.501.51
Total maintenance Total expenditures fr			٠.				11,731 51
Total expenditures fr	om a	ppro	pria	tion	for Ser	vice	
Mains and Relaying	Mains	8					\$71,595 99
Details of expendit	פפיננו	1117	der	ลทา	aranria	tion	for Exten-
Details of expendit	urcs	um	aci	apl	or opria	100	7 /T
sion of Water Mains	5 101	'th	e 1	ısca	u year	192	(From
loan.)							
104111)							
Construction of new mains.					\$285,616	46	
Sorvice pipes pour					3.071	27	
Service pipes, new Stock purchased		•	•		72 308	79	
Stock purchased	•	•		•	12,500		
					\$360,996	45	
Less stock used and debit tra	mafor	fron	. 109				
Less stock used and debit tra	msiei	поп	1 194	20,	12,412	24	
Total expenditures from	n enn	ronr	iatio	n fo	r Extons	ion	
of Water Mains	a app	ropt	iatio	11 10	d 12XCCHs	11/11	\$282,524 21
of Water Mains .				•		•	\$202,021 21
75 . 11 . 0			,				c T
Details of expendit	ures	un	der	ap	propri	ation	tor Lay-
ing and Relaying S	tree	t. V	Vat	er	Mains	for	the year
	uicc	. ,	1 440	CI	IVECTION	101	one year
1927. (From loan.)							
Construction of new mains Replacement of old mains Service pipes, new					\$11,538	69	
Replacement of old mains	٠.				1,058	29	
Service pipes, new					647	68	
Total expenditures for t	he ye	ar 19	927				\$13,244 66
•	-						
Appropriation for Dock	SOTIA	BE /	AND	FAN	TEUIL H	ALL	
Square Im	PROV	EME	NT.				
•							
Laying and relaying water							0.000
widenings							\$1,972 57
APPROPRIATION FOR KNEED	LAND	STR	EET	IM	PROVEME	NT.	
Laying and relaying water	man	1S O	n ac	com	nt of sti	ecc	29 751 45
widening	•						\$2,751 45
	Dage		Err				
	Resi		-				
Expenditures for ice furnishe	ed at	drin	king	four	ntains		\$4,602 14
			0				

# COST OF CONSTRUCTION AND CONDITION OF WATER DEBT.

Cost of construction to December Cost of construction to December	r 31, r 31,	1927 1926	:		:	\$21,290,135 91 20,710,570 44
Increase during the year .						. \$579,565 47
Outstanding loans December 31, Outstanding loans December 31,	$\frac{1926}{1927}$	• •	:	:		\$1,244,000 00 1,228,000 00
Decrease during the year						. \$16,000 00
Cost of existing works December	. 21	1027				
						. \$94,832 16
Pipe, yards and buildings .	•	•	•	•	•	
Engineering expenses		diamir			•	. 31,013 30
Distribution system (additi						* 00 000 490 17
year \$579,565 47)				•	•	. * 20,669,430 17
Hyde Park water works .						. 468,000 00
						\$21,290,135 91
High Pressure Fire System .						. \$2,062,155 92

^{*} Includes \$85,121.50 High Pressure Fire Service Extension expended in 1925 and 1926.

### INCOME BRANCH.

Table No. 1.— Statement of Each Year's Water Rates, 1912 to 1927, as of December 31, 1927.

YEAR.	Assessments.	Abatements.	Collections.	Outstanding.
1912	\$3,001,771 87	<b>\$</b> 49,937 87	\$2,943,402 48	\$8,431 52
1913	3,004,331 52	42,088 77	2,954,183 62	8,059 13
1914	3,034,885 83	41,544 93	2,970,232 82	23,108 08
1915	2,960,797 45	15,084 24	2,903,015 36	42,697 85
1916	3,130,590 53	16,402 64	3,062,818 84	51,369 05
1917	3,120,878 86	19,287 29	3,043,525 11	58,066 46
1918	3,359,714 95	98,624 99	3,197,299 43	63,790 53
1919	3,210,147 91	27,111 37	3,114,335 15	68,701 39
1920	3,503,677 88	62,017 25	3,380,167 98	61,492 65
1921	3,615,663 51	34,119 41	3,524,717 28	56,826 82
1922	3,612,715 51	31,450 66	3,522,028 49	59,236 36
1923	3,817,084 26	35,464 15	3,739,213 26	42,406 85
1924	3,832,531 26	41,329 11	3,780,382 74	10,819 41
1925	3,875,434 21	37,420 53	3,821,732 36	16,281 32
1926	3,910,049 04	38,107 67	3,835,721 48	36,219 89
1927	3,974,211 79	17,983 32	2,849,162 80	1,107,065 67

Table No. 2.— Elevator, Motor and Fire Services.

Elevator services installed	
Elevator services abandoned	
Total number of elevator services in use December 31, 1927	505
Fire pipes installed	118
Fire pipes abandoned	2
Total number of fire services in use December 31, 1927	2,955
Number of motor services in use December 31, 1927	96
Number of motor services metered	20

METER BRANCH.

Table No. 1.— Statement of Work During Year 1927.

	zi.	nued.	Changes.			'ë		.E .:
Make,	New Sets.	Discontinued.	Out.	In.	Tested.	Repaired Shop.	Resets.	Repaired in Service.
Worthington disc	25	63	1,490	901	4,068	992	47	76
Watch dog	2,270	133	1,163	2,867	4,729	1,343	167	776
King	49	83	1,793	1,872	3,718	2,052	74	574
Hersey disc	84	281	3,641	2,907	7,647	3,296	111	707
Hersey rotary	9	8	121	34	259	58		s
Crown	5	20	135	20	295	17	1	7
Nash	4	5	73	36	255	44		15
Lambert	7	4	46	29	103	54	1	
Keystone		2	23	20	48	20	2	
Trident		2	26	15	54	29	3	21
Hersey compound			2	2				7
Hersey detector	6	1	5	6				9
American	1	8	184	44	377	184	6	100
Federal	1	5	82	31	170	27	1	19
Totals	2,461	615	8,784	8,784	21,723	8,118	413	2,319

Table No. 2. Meters in Service December 31, 1927.

Make.	Diameter in Inches.											
ALANE.	5/8	3 4	1	11/2	2	3	4	6	8	10	12	Totals.
Hersey disc	42,229	3,141	1,395	710	278	95	66	5				47,919
Worth disc	8,764	38	12	38	68	58						8,978
Watch dog	17,720	553	723	407	245	118	30					19,796
King	10,510	393	81	63	57							11,104
Hersey rotary	317	274	172	137	158	53	22	15				1,148
Crown	336	425	178	127	137	40	37	8				1,288
Nash	330	36	94	12	2	2						476
Lambert	270	95	76	17	15		4					477
Trident	159	3	3	4	4	14	5	2				194
Hersey detector						5.	23	33	13	18	4	96
Old Worthington		8	25	1	8	11	1					54
Keystone	169	170	23	1	1	6						370
Metropolitan		12	1									13
American	80	454										534
Empire	105											105
Protectus							2	1	2	2		7
Gem			'		1			2				3
Standard			i									4
Thomson	6				i							8
Hersey compound		1					3	7				10
Federal									- 1			1,273
Totals	82,272	5,604	2,783	1,517	974	402	193	73	15	20	4	93,857

Table No. 1.

Showing Length of Water Pipes and Connections Owned and Operated by the Public Works Department, Water Division (Water Service) and Number of Valves in same December 31, 1927.

Totals.		4,881,681 14,096 431 721	76,517 307 11 29	20,934 67 22 4	4,937,264 14,336 438 728
	7	6,773	126	230	6,669
	20	9,442 16 1			9,442 16 1
	4	85,357 969 58	© 80 : :	2,030	83,336 9,442 567 16 1 58 7
	9	1,128,826 3,599 1	1,317 10	6,417	1,123,726 3,571 1 131
	oc	955,231 3,249 3 122	31,393 152 12	1,744	984,880 3,394 3
	10	444,538 1,485 1 44	2,023	171 2	446,390 1,498 1 42
VCHES.	12	1,605,097 4,233 48 164	31,911 108 1	7,514 14 8	1,629,494 4,327 49 162
ES IN ]	14	5,041			5,041
a of Pip	91	86,520 288,120 72 655 43 75 46 66	2,702	26	290,796 670 75 67
DIAMETER OF PIPES IN INCHES.	20	86,520 72 43 48	8# · · ·	620	86,741 73 42 46
	24	81,414 76 75 28	3,784	762	84,436 78 78 30
	30	91,819 57 108 34		1,420	90,399 56 107 33
	36	43,644 20 34 11	136	: : : <del>-</del>	43,780 20 34 11
	40	. 16,081			16,081
	42	15,980 4 5 5			15,980
	84	17,798 16 28 3	2,275 1 5		20,073 17 33 5
		Length owned and operated December 31, 1926 Gate valves in same Air valves in same Blow-offs in same.	Length laid and relaid during 1927. Gate valves in same. Air valves in same. Blow-offs in same.	Length abandoned during 1927. Gate valves in same. Blow-offs in same. Air valves in same.	Length owned and operated December 31, 1927 Gate valves in same Air valves in same. Blow-offs in same.

Total 935.09 miles in system.

Table No. II.

Total Number of Hydrants in System December 31, 1927.

	Lowry.	Boston Lowry.	Boston Post.	Ordinary Post.	Bachelder and Finneran Post.	Ludlow Post.	Chapman Post.	Coffin Post.	Matthews Post.	Boston.	Totals.
City proper (public)	470	36	500	251	207					53	1,517
" (private)	4		9	6						39	58
Roxbury (public)	255	52	427	322	460					13	1,529
" (private)	2	1	3	4						10	20
West Roxbury (public)	21	152	492	986	330					13	1,994
" (private)				15	1					1	17
Brighton (public)	19	41	275	513	140					12	1,000
" (private)				8						2	10
Dorchester (public)	190	123	683	1,151	292	,				17	2,456
" (private)		1	8		2					4	15
South Boston (public)	106	19	251	184	89					14	663
" (private)	3	1		15						27	46
East Boston (public)	25	15	207	229	54					6	536
" (private)	8	1		9						25	43
Charlestown (public)	76	34	141	65	29					2	347
" (private)	13	1		37						5	56
Hyde Park (public)			19	332	84	7	116	1			559
" (private)						13	55		4		72
Deer Island (private)			1	19							20
Long Island (private)				6							6
Thompson's Island (private)				2							2
Gallup's Island (private)				3						1	4
Rainsford Island (private)				3							3
Quincy				9							9
Total number (public)	1,162	472	2,995	4,033	1,685	7	116	1		130	10,601
Total number (private and suburban)	30	5	21	136	3	13	55		4	114	381

Total Number and Aggregate Length of Service Pipes of Various Sizes

Connected with System December 31, 1927.

Size.	Total Number.	Aggregate Length in Linear Feet.
}-inch	6,897	158,251
§-inch	91,899	2,530,904
3-inch	3,600	124,182
1-inch	5,774	204,943
11-inch	632	18,057
1½-inch	1,834	54,356
2-inch	2,376	71,762
2½-inch	12	267
3-inch	1,057	29,300
4-inch	3,505	91,430
6-inch	225	24,275
8-inch	72	4,596
10-inch	15	1,771.
12-ineh	20	4,005
16-inch	5	448:
Totals	* 117,923	3,318,547

^{*} The completion of the metering of all services to within 1 per cent of the total number of live service pipes discloses the fact that the total number of service pipes will not exceed 95,000. The large discrepancy is found to be due to the fact that previous to 1880 no deductions were made for pipes abandoned, etc.

# Cost of Extension of Main Pipe.

Remarks.	6 Private work.	Private work.	9 Private, gravel.	7 Public, under construction.	Private, gravel and rock.	Private, rock.	7 Private, clay.	211 88 Private, sand.	5 Private work.	9	\$464 28 Public, ash filled.	Private, gravel.	Private, gravel.	Private, gravel.	Private, clay.	Private, gravel.	
Total Cost.	\$475 76	\$545 83	467 49	525 67	606 43	683 34	112 07		1,059 75	\$4,212 46		943 53	861 79	974 70	122 31	1,345 93	\$4,712 54
Cost of Inspec- tion.			\$6 11	9 59	21 04	40 74	3 20	8 25	40 26	\$129 19	\$32 55	10 18	26 19	22 37	2 72	34 62	\$178 63
Cost of Labor.	\$200 77	\$303 94	218 21	213 93	284 40	321 00	20 00	61 60	376 20	\$1,799 28	\$190 00	365 77	327 20	292 03	52 32	518 58	\$1,745 90
Cost of Department. Materials, etc.	\$274 99	\$241 89	243 17	302 15	300 99	321 60	88 87	142 03	643 29	\$2,283 99	\$241 73	567 58	458 40	06 099	67 27	792 73	\$2,788 01
Feet.	170	47	185	183	193	200	20	65	379	1,272	116	301	279	269	48	421	1,434
Sizis.)	-63	9	9	9	9	9	9	9	9	9	00	00	20	00	00	00	
District.	Roxbury.	Roxbury.	Roxbury.	Dorchester.	Dorchester.	Dorchester.	West Roxbury.	West Roxbury.	Brighton.		City Proper.	South Boston.	South Boston.	South Boston.	East Boston.	East Boston.	
Location.	From Ruggles street	Muddy river	Zamora street	Sumner street	Bellevue street	Savin Hill avenue	Stratford street near Woodward avenue.	St. Joseph street	Commonwealth avenue	Totals.	South Market and Chatham streets,	Marine road and East Eighth street,	Between K and L streets	Preble and Hyde streets	Breed street	Orient avenue and Tower street	Carried forward
	Bills court	Huntington avenue	Zamora court	Summer terrace	Cornell street	:	Proposed street,	:	Wilson park		:	:	Elkins street	Wesley street	Ashley street	Sea View avenue	

Cost of Extension of Main Pipe. -- Continued.

Remarks.		Private, macadam.	Private, ash.	22 Private, clay.	96 Private, rock and clay.	Private, gravel.	85 Private, clay.	1,940 01 Private, filled.	Private, clay.	577 55 Private, clay.	633 96 Private, gravel.	1,005 49 Private, gravel.	1,087 37 Private, ash filled.	Private, ledge.	1,566 67 Public, gravel.	1,732 76 Private, clay and rock.	77 Private land.	986 11 Private, gravel.
Total Cost.	\$4,712 54	1,963 21	572 38	297 22	627 96	744 65	57 85	1,940 01	886 90	577 55	633 96	1,005 49	1,087 37	1,672 83	1,566 67	1,732 76	891 77	986
Cost of Inspec- tion.	\$178 63	135 75	44 00	8 63	206 38	5 75	80	24 28	20 13	9 35	5 43	8 15	22 40	:	32 58	19 94	21 90	21 72
Cost of Labor.	\$1,745 90	1,185 50	212 84	135 00	184 14	241 85	14 00	664 44	358 36	176 68	224 70	383 67	413 16	805 67	576 54	1,010 41	315 93	599 84
Cost of Depart- ment Material, etc.	\$2,788 01	641 96	315 54	153 59	237 44	497 05	43 05	1,251 29	508 41	391 52	403 83	613 67	651 81	867 16	957 55	702 41	553 94	664 55
Feet.	1,434	273	151	108	86	223	13	635	253	120	194	354	369	440	240	301	324	236
Size.		œ	×	œ	oo	oc	œ	- 00	œ	œ	œ	oc	oc	œ	œ	oo	œ	<u>∞</u>
District.		Roxbury.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.
Location.	Brought forward	Humboldt avenue	Balsam street	Southern Artery	Ashland street and Roanoke road	Hallet-Davis and Whitridge streets	Ormond street	Southern Artery	West Selden and Delhi streets	Rich and Woodlawn streets	Centre street	Milton street	Humphreys and Holden streets	Blue Hill avenue and Norfolk street,	Minot street and Oak avenue	Southern Artery	Blue Hill avenue	Newkirk street   Neponset avenue and Manley street,
STRBET.		Elbert street	Ashton street	Stone terrace	Pleasant View street	Cedar Grove street	Byers road	Owencroft street	Rich street	Delhi street	Ginita street	Rangeley street	Gene street	Hosmer street	Glide street	Emerson avenue	Dyer avenue	Newkirk street

	878 65 Public, gravel.		1,587 49 Private, gravel.	522 90 Public, clay.	Public, macadam.	Private, clay.	Private.	Private, clay.	1,026 29 Private, gravel.	Private, clay		Private, clay.	Private, clay filled.	Private, clay filled.	Private, gravel.	Private, gravel.	Public, under construction	78 Private, gravel.	Private, mixed filler.	Private, ash filler.	Publie, gravel.	Private, clay.	
	878 65		1,587 49	522 90	1,303 52	323 23	160 02	115 51	1,026 29	307 66	49 83	266 50	541 30	807 16	772 99	1,901 95	572 81	540 78	450 60	787 68	184 68	1,163 27	\$36,222 05
	16 29		12 90	15 13	44 73	15 18		3 79	37 05	3 04	4 32	11 50	20 12	19 17	43 12	47 13	26 68	98 6	45 53	24 28	:	30 35	\$1,195 99
	346 16		570 20	140 41	643 61	93 00	91 50	41 25	401 28	237 38	12 00	99 45	157 34	230 50	259 09	911 41	197 89	230 11	157 22	218 47	61 63	278 66	\$14,327 19
	516 20		1,004 39	367 36	615 18	215 05	68 52	70 47	587 96	67 24	33 51	155 55	363 84	557 49	470 78	943 41	348 24	300 81	247 85	544 93	123 05	854 26	\$20,698 87
207	17	49	492	41	244	53	52	33	284	48	12	41	81	192	188	451	186	232	112	216	15	308	9,620
	30	000	00	30	-00		00	- 00	∞	30	00	×				00	- 00	00	8	00	oc	oc .	
Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester,	Dorchester.	Dorchester,	Dorchester.	Dorehester,	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorehester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	
Weyanoke and Shenandoah streets	At Wessex street	Wessex street	Chickatawbut street and Oak avenee,	Adams street	Bowdoin and Olney streets	Floyd street	Cushing avenue	Milton avenue	Harvard street and Blue Hill avenue,	River street,	Upham avenue	Southern Artery	Southern Artery	Norfolk street	Cushing avenue	Normandy street	Pleasant and Greenmount streets	Adams street	Blue Hill avenue	Jones avenue	Opposite No. 95	Southern Artery	Carried forward
Wesscx street	Shenandoah street	Weyanoke street	Rosaria street	Butler street	Blakeville street	Lucerne street	Cushing terrace	Codman Hill street	Donald road	Duxbury road	Cushing terrace	Stone terrace	Owencroft street	Norfolk terrace	Upham avenue	Wilder road	Greenmount street	Delmont street	Columbine street	Jacobs street	Minot street	Vera street	

Cost of Extension of Main Pipe. -- Continued.

Remarks,		Public, clay.	Private, filled.	Private, gravel.	Private, clay.	1,082 90 Private, clay.	Private, clay.	Private, loam	Private, elay.	Private, clay and rock.	Private, clay.	Private, gravel.	Private, clay and rock.	Private, elay and rock.	Private, street.	Private, street.	Private, street,	Private, street.	Private, street.	293 25 Public, gravel.
Total Cost.	\$36,222 05	1,153 25	467 83	2,143 29	1,181 66	1,082 90	950 22	628 29	782 57	538 96	1,643 64	1,361 83	657 14	155 15	1,915 99	613 03	692 99	741 12	557 18	293 25
Cost of Inspec- tion.	\$1,195 99	30 35	15 98	38 34	30 35	52 47	30 25	35 75	12 14	12 14	27 50	57 50	44 57	26 60	31 87	25 24	24 60	25 56	71 61	
Cost of Labor.	\$14,327 19	390 93	166 06	674 50	345 20	370 76	352 60	208 67	242 05	221 93	428 62	558 15	337 73	52 30	625 15	192 22	216 18	262 27	189 50	
Cost of Depart- ment Materials,	\$20,698 87	731 97	285 79	1,430 45	806 11	659 67	567 37	413 87	528 38	304 89	1,187 52	746 18	274 84	76 25	1,258 97	395 57	452 21	453 29	348 51	293 25
Feet.	9,620	460	162	636	328	305	268	145	202	140	463	325	145	32	694	183	226	215	135	30
Size. (Inch.)	:	œ	œ		-00	00	00	00	00	00	œ	œ	œ	×	œ	00	œ	œ	œ	<u>«</u>
District.		Dorchester,	Dorehester.	Dorchester,	Dorchester,	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.
Location.	Brought forward	Codman and Vera streets	Newhall avenue	Milton and Marsh streets	Codman and Codman Hill streets	Weld street and Willowdean road	Tarleton road	Selwyn and Centre streets	La Grange street	Midvale street	La Grange and Emmons streets	Pond street	Stimson and Cottage roads	Spring road	Plainfield and Forest Hills streets	Vermont street	Selwyn and Centre streets,	Maleolm road	Rossmore road	Pond street
Зтневт.		Southern Artery	Humes road	Grayson street	Nevada street	:	Sanborn avenue	:	West Saville street	Hodgdon terrace	Redgate road	:		:	:	:	:	Greenhill avenue	Steadman street	Pond eirele, West

St. Joseph street	Woodman street and Arborway   West Roxbury.	West Roxbury.	®	Soll	1 060 07	KOK 91	19		1 679 09 Dilli
Arborway	At St. Joseph street	West Roxbury.	12	10	7,000	77 000	70 01		r abite, unaer construction.
Forest Hills circle	Forest Hills place	West Roxbury.	-00	566	479 76	294 06	27 50	801 32	Private, clay.
Stella road	Hammott road	West Roxbury.	00	181	466 10	207 29	18 21	691 60	Private, ashes.
Alder street	Roslindale avenue	West Roxbury.	00	30	95 03	37 50	2 28	134 81	Private, rocky.
Roslindale avenue	Walworth and Dudley streets	West Roxbury.	œ	209	1,010 25	826 07	53 64	1,889 96	Public, clay and rock.
Alder street	Walworth street	West Roxbury.	×	09	147 06	82 86	4.55	234 47	Private, clay and rock.
Bullion road	Gretter road	West Roxbury.	œ	492	836 43	857 23	60 38	1,754 04	Private, sandy clay.
Welles street.	Washington street	West Roxbury.	×	38	161 89	41 80	11 50	215 19	Private, clay.
Cranston road	Church street and Willowdean road, West Roxbury.	West Roxbury.	œ	5.15	878 63	870 35	138 72	1,887 70	Private, sandy clay.
Dana road	Maple road	West Roxbury.	œ	287	590 39	382 75	18 21	991 35	Private, rock and clay.
New Park avenue	Beech street and West Roxbury Parkway	West Roxbury.	œ	375	757 53	399 20	38 34	1,195 07	Private, clay.
Walnut road	Dana and Chestnut roads	West Roxbury.	œ	625	1,414 88	594 95	44 36	2,054 16	Private.
Brook road	Forest Hills street	West Roxbury.	œ	25	112 27	27 50	3 04	142 81	Private, sandy.
Rhoda street	Central and Centre streets	West Roxbury.	œ	150	360 51	172 60	15 17	548 28	Private, clay.
St. Peters street	Boylston and Paul Gore streets	West Roxbury.	x	303	642 66	346 23	21 72	1,010 61	Private, sandy.
Parkvale road	Weld street	West Roxbury.	Æ	399	298 00	434 50	35 15	1,267 65	Private, clay.
Wolf street	La Grange street	West Roxbury.	œ	377	746 41	392 00	19 17	1,157 58	Private, clay.
Chilton road	Weld street	West Roxbury.	x	307	666 13	353 98	12 78	1,032 89	Private, clay.
Walworth street	Cedar and Washington streets	West Roxbury.	x	440	913 28	590 28	25 64	1,529 20	1,529 20 Public, clay.
Chestnut road	Walnut road	West Roxbury.	x	62	84 78	55 80	5 00	145 58	Private work.
Woodward road	West Border road	West Roxbury.	œ	14	79 47	25 50	5 04	110 011	Private work.
Pond place	Pond street	West Roxbury.	œ	243	29 909	279 62	11 38	897 67	Private work.
	Carried forward		1 01	21,105	\$44,831 16	\$28,029 26	\$2,321 90	\$75,182 32	

Cost of Extension of Main Pipe. — Continued.

Remarks.		1,139 S4 Private, clay.	72 Public, clay.	454 85 Private, sand.	1,611 10 Private, rock and gravel.	366 01 Private, gravel.	Private, clay.	59 Private, clay.	731 78 Private, rock and clay.	394 53 Private, elay.	2,011 28 Private, clay.	1,124 27 Private, clay.	39 Private, clay.	292 22 Private, gravel.	739 84 Private land.	435 16 Public, clay.	217 30 Private, clay.	1,474 92 Private, ashes.	3,476 54 Private land,
Total Cost.	\$75,182 32	1,139 84	627 72	454 85	1,611 10	366 01	209 84	847 59	731 78	394 53	2,011 28	1,124 27	169 39	292 22	739 84	435 16	217 30	1,474 92	3,476 54
Cost of Inspec- tion.	\$2,321 90	12 14	21 25	19 73	134 19	0 9	62 9	31 95	19 17	62 9	53 87	27 75	0 9	12 78	57 67	19 17	19 17	37 38	66 85
Cost of Labor.	\$28,029 26	568 26	135 01	123 76	926 22	80 93	120 00	327 72	281 23	147 40	711 18	286 70	34 58	105 80	513 57	213 00	84 00	530 80	943 18
Cost of Department Materials, etc.	\$14,831 16	559 14	471 46	311 36	550 69	279 01	83 45	487 92	431 38	240 74	1,246 23	809 82	128 74	173 64	168 60	202 99	114 13	906 74	2,466 51
Feet.	21,105	192	197	125	340	15	61	274	210	134	629	384	36	98	171	108	36	476	1,036
Size.	:	œ	00	>0	30	S	x	x	00	<b>x</b> 0	- 00	30	œ	x	×	œ	œ	œ	<u>~</u>
j.	:	xbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	West Roxbury.	toxbury.	West Roxbury.	West Roxbury.	West Roxbury.	ton.	Brighton.	Brighton.	Brighton.
District.		West Roxbury.	West R	West I	West I	West I	West I	West I	West I	West B	West F	West I	West B	West F	West I	Brighton.	Brig	Bri	
Location. Distric	Brought forward	Dana road West Ro	Dale street West R	Lagrange street West I	Rockwood street West I	At No. 19 and No. 21 West I	Lagrange street West 1	Parmenter road West I	Cornell and Brooks streets West F	Lagrange street West B	Weld and Dunbar streets West F	Hillside avenue and Clarendon park, West Roxbury.	Private land West B	Glendale street North West F	Glade, and Glenside avenues West I	Beaeon street and railroad Brigl	Washington street Brig	Harriet and Madeline streets Bri	Malvern and Babeock streets   Bı

842 42 Private, gravel.	Private, sand.	Private, sand.	80 Private, clay.	1,091 48 Private, gravel.	838 63 Private, gravel.	190 28 Private, gravel.	Private, clay.	Public, gravel.	1,251 01 Private, clay.	1,279 69 Private, gravel.	Private, clay.	200 55 Private, gravel.	Private, gravel.	Private, clay.	Private, clay.	Private, gravel.	Private, land.	2,276 44 Private, clay and rock.	Public street.	Private, clay.	Private, clay.	
842 42	169 97	149 12	851 80	1,091 48	838 63	190 28	1,407 83	410 18	1,254 01	1,279 69	274 67	200 55	248 05	306 13	566 43	43 93	218 71	2,276 44	521 08	768 43	920 43	\$3,442 40 \$106,336 76
33 30	5 75	5 75	22 37	68 29	30 35	8 25	49 50	8 35	44 79	24 28	9 59	3 99	68 9	4 55	0 9	1 60		97 75	6 24	56 72	68 54	\$3,442 40
316 50	31 15	23 45	294 58	352 50	261 11	39 20	415 32	166 70	306 18	365 74	73 75	40 00	70 63	107 10	152 10	s 00	130 50	1,211 59	119 00	255 23	267 22	\$39,170 15
492 53	133 07	119 92	534 85	620 69	547 17	142 83	943 01	235 13	603 04	889 67	191 33	156 56	171 03	194 48	408 26	34 33	88 21	967 10	395 84	456 48	584 67	\$63,724 21
s 188	888	8 27	8 226	8 353	8 245	8 47	8 392	82	8 375	8 351	8 54	8 31	8 48	8 118	8 150	ss ss	8 48	8 440	8 105	8 206	8 241	8 29,438
																						1
Brighton.	Brighton.	Brighton.	Brighton.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	
Brooks street and Ranelegh road	Adamson street	Adamson street	Hardwick street	Belnel road	Cleveland street	Metropolitan avenue	Vose avenue and Edith street	End of race track	Milton avenue	Arlington street and railroad	River street	River street.	River street	River and Hillside streets	Ellis and Church streets	Belnel road	Ashville road	River and Rockdale streets	Church street	Sunnyside street	Sunnyside street	Totals
Holton street	Seven Pines	Coleran strect	Durland street	Hopewell road	Coleman street	Jefferson street	Pleasant street	Hyde Park avenue	Reservoir street	Providence street	Ray street	Adams street	Alpine street	Church street	Hillside street	Hopewell road	Deforest street	Violante street	Charles street	Durant road	Shirley road	

Cost of Extension of Main Pipe. - Continued.

STREET.	Location.	District.	Size. (Inch.)	Feet.	Cost of Department Materials, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Remarks.
St. James avenue	Berkeley street	City Proper.	10	153	\$773 40	\$242 75	\$15 61	\$1,031 76	Public, granite block and concrete base.
Marsh street	Hallet street	Dorchester.	10	245	467 54	232 75	12 22	712 51	
Goodale road	Blue Hill avenue and Wellington Hill street.	Dorchester.	10	341	867 01	403 99	100 63	1,371 63	1,371 63 Private, clay.
Whitten street	Alther and Adams streets	Dorchester.	10	449	1,046 76	487 45	27 16	1,561 37	Private, gravel.
Wilmington avenue	Southern Artery	Dorchester.	10	26	2	100			
Southern Artery	Wilmington avenue	Dorchester.	16	4	194 61	137 10		291 71	Public land.
6 Goodale road	Wellington Hill street	Dorchester.	10	96	464 52	124 23	46 00	634 75	75 Private, clay.
Hammond street	Stella road	West Roxbury.	10	7.4	389 33	111 26	18 21	518 80	Private, ash.
Parkwood terrace	Parkton road	West Roxbury.	10	111	458 10	210 20	23 08	691 38	Private, ash.
Gaffney street	Entrance to Base Ball Park	Brighton.	10	15	159 06	140 00	4 79	303 85	Private land.
Edgewater Drive	River street	Hyde Park.	10	62	302 61	103 75	20 77	427 13	Private, clay.
	Totals		12	1,623	\$5,082 94	\$2,193 48	\$268 47	\$7,544 89	
Washington street	Waltham and Wilkes streets	City.	12	123	465 65	235 87	12 22	\$713 74	Public, granite block and concrete base,
Warrenton street	Tremont and Stuart streets	City.	12	545	1,819 32	725 00	88 02	2,632 34	Publie, elay and granite.
Orient avenue	Tower street	East Boston.	12	178	617 90	258 06	11 54	887 50	Private, clay.
Hurleroft avenue	Alicia street	Dorehester,	12	31	111 97	31 00	80	143 77	Private, clay.
Ormona street	Outlook road and Wellington street	Dorchester.	12	469	1,482 62	494 86	28 62	2,057 36	Private, clay.
Flavia street	Chickatawbut and Oak streets	Dorchester.	12	476	1,551 97	587 20	29 87	2,169 04	2,169 04 Private, gravel.
Welles avenue	Dorehester Tunnel	Dorchester,	12	129	414 21	534 00	34 50	982 71	982 71 Public, gravel,

Cost of Extension of Main Pipe.—Concluded.

			-	-					
	Location.	District.	Size. (Inch.)	Feet,	Cost of Depart- ment Materials, etc.	Cost of Labor.	Cost of Inspec- tion.	Total Cost.	Remarks.
	Brought forward		12 1	12 10,467	\$31,420 55	\$13,985 26	\$1,138 35	\$46,514 16	
-	West Border road and Stratford street,	West Roxbury.	12	294	792 32	294 03	25 56	1,111 91	Private, clay.
-	Weld street	West Roxbury.	12	101	418 64	110 09	22 37	551 10	551 10 Private, clay.
	Lagrange and Vermont streets	West Roxbury.	12	429	1,263 59	577 59	21 57	1,862 75	Private, gravel.
	Knoll street	West Roxbury.	12	34	188 26	63 00	6 30	257 65	65 Public, clay.
_	Wyvern street	West Roxbury.	12	92					
-4	At Florence street	West Roxbury.	12	30	323 54	596 60	50 84	86 026	970 98 Private, rock.
	Malcolm street	West Roxbury.	12	96	362 15	157 72	19 17	539 04	Private, clay.
	Washington and Forest Hills streets. West Roxbury.	West Roxbury.	12	313					
_	From Washington street	West Roxbury.	12	396	99 866	488 25	55 00	1,508 91	1,508 91 Public, sandy.
	Commonwealth avenue and Gillard road.	Brighton.	12	627	1,956 79	978 63	55 00		2,990 42 Private, clay.
_	Bellvista road	Brighton.	12	136	359 93	248 68	25 56	634 17	634 17 Private, clay.
	Commonwealth avenue and Ashford street.	Brighton.	12	703	1,760 75	503 80	20 13	2,284 68	2,284 68 Private, clay.
	From Lake street	Brighton.	12	848	2,270 37	875 52	79 88	3,225 77	Private, ash filled.
	Faneuil street	Brighton.	12	490	1,426 02	98 609	95 60	2,130 98	Private, gravel.
	Hillside and Sunnyside streets	Hyde Park.	15	206	1,456 99	692 20	77 88	2,227 07	Private, clay.
	Sunnyside and Hyde Park streets	Hyde Park.	61	225	859 61	348 00	38 34	1,245 95	Private, clay and rock,
	Hopewell and Friendship streets	Hyde Park.	15	338	66 696	342 00	43 13	1,355 12	1,355 12 Private, gravel.

Belnel road	Belnel road Osceola and Hopewell streets	Hyde Park.	12	1269	2,045 67	955 01	139 61	3,140 29	3,140 29  Private, gravel.
Richmond road	Oakland street	Hdye Park.	12	220	733 04	533 94	97 12	1,364 10	Private, rock and clay.
	Totals		12	17,042	\$49,606 87	\$22,359 68	\$1,978 50	\$73,945 05	
Southern Artery	Oakridge street	Dorchester.	16	103	\$885 58	\$309 48		\$1,195 06	Private, land.
Southern Artery	Washington and Oakridge streets	Dorchester.	16	439	2,238 20	652 60	38 50	2,929 30	2,929 30 Public, clay.
Southern Artery	West from Oakridge street	Dorchester.	16	72	257 16	180 00	7 91	445 07	Public, under construction.
East Border road	New Park avenue	West Roxbury.	16	23	78 98	36 00	8 62	123 60	Publie land, Metropolitan. Commission.
West Roxbury Parkway. Across Centre street	Across Centre street	West Roxbury.	16	348	00000	0,0	0		
Centre street	West Roxbury Parkway	West Roxbury.	16	20	2,490 02	80 016	36 42	3,449 73	l'ublie, clay.
West Border road	Stratford and Belton streets	West Roxbury.	16	1,197	5,590 61	1,967 63	239 67	16 262,7	Publie land, Metropolitan Commission.
West Border road	West Border road Pelton street	West Roxbury.	16	447	6	i	,		
West Roxbury Parkway. East	East and West Border roads	West Roxbury.	16	191	6,004 00	1,110 74	121 00	4,290 29	l'ubhe land, clay.
	Totals		16	2,840	\$14,600 70	\$5,178 14	\$452 12	\$20,230 96	
Adams street	Southern Artery	Dorchester.	20	184	\$987 06	\$377 20	\$20 37	\$1,384 63	Public, under construction.
	Totals,		:	184	\$987 06	\$377 20	\$20 37	\$1,384 63	
Southern Artery	Dorchesteravenue and Adamsstreet,	Dorchester.	24	2,926	20,601 21	6,971 10	231 14	27,803 45	Public, under construction.
Pond street	Arborway	West Roxbury.	24	73	503 34	:	:	503 34	Public, under construction.
Pond street	At Prince street	West Roxbury.	24	09	000	00		000	
Prince street	At Pond street	West Roxbury.	24	12	1,720 81	591 05	es es	2,708 29	rubne gravel.
	Totals		24	3,071	\$22,825 36	\$7,862 73	\$326 99	\$31,015 08	
Columbus avenue	Boylston and Arlington streets		:	1,098					
Charles street	Center entrance, Public Garden and Boylston street	City.	48	520	\$170,36502	\$76,492 46	\$5,497 99	\$5,497 99 \$252,355 47	Public, street.
Arlington street	Columbus and Cortez street		:	657					
	Totals		48	2,275	2,275 \$170,365 02	\$76,492 46	\$5,497 99	\$5,497 99 \$252,355 47	

Cost of Replacement of Main Pipe.

Remarks.	Publie, granite block and concrete base.	Public, macadam.	Public, maeadam.	Public, gravel.	Public, macadam.	Public, under construction.	Public, under construction.	Public, under construction.	Public, under construction.	Publie, under construction.	Public, macadam.	Public, macadam.	Private, gravel.	Public, gravel.	Private, gravel.	6 Public, gravel and sand.	6 Public, clay.
original Size (.don1)	1100	00	∞	9	9	9	9	9	oo	œ	ж	9	9	9	4	9	9
Total Cost.	\$409 99	1	0e /87	1,025 21	184 96	106 13	92 03	90 59	194 48	68 37	176 55	153 65	34 55	45 01	108 04	131 50	222 87
Cost of Inspec- tion.	\$16 29		:	18 00	4 79	3 20	3 04	3 04	10 63	4 56	9 11	3 20	3 20	3 20	3 20	6 24	38 34
Cost of Labor.	\$144 90		98 36	375 70	83 00	19 50	16 50	19 50	42 00	27 00	43 68	68 13	6 75	8 10	36 25	22 00	48 40
Cost of Department Materials, etc.	\$248 80		229 14	631 51	97 17	83 43	72 49	68 05	141 85	36 81	123 76	82 32	24 60	33 71	68 61	103 26	136 13
Feet.	126	12]	<del></del>	302	83	19	11	13	28	18	ro.	63	20	9	57	30	37
Size.	67	œ	- 30	œ	œ	00	×	00	×	œ	œ	œ	œ	-00	×	×	30
District.	City Proper.	Roxbury.	Roxbury.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	West Roxbury.	Brighton.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.
Location.	From Hanover street	TotalsAt Hollander street	At Harold street	Between Oak avenue and Minot street	Between Bowdoin and Olney streets.	At Southern Artery	At Southern Artery	From Southern Artery	From Southern Artery	At Southern Artery	Between east and west lines of Sig- ourney street.	At Durland street	At River street	At River street	From River street	At Cleveland street	At Roxanu street
Street.	Wesley place	Harold street	Hollander street	Glide street	Blakeville street	Granville street	Millwood street	Frederika street	Magdala street	Becket street	Glen road	Hardwick street	Reddy avenue	Rosa street	LeFevre street	Child street	Charles street

4 Public, gravel.		Public, under construction.	Publie, under construction.	Public, under construction.		12 Publie.	Public, asphalt.	Public, granite block and granite base.	Public, granite block and concrete base,	Public, clay, gravel and asphalt.	Public, clay.	Public, clay.	Publie, clay.	Publie, clay.	Public, elay.	6 Public, clay.	Public, clay.	6 Public, clay.	6 Public, clay.	Public, clay.	
41		10	10	10		12	9	9	15	9	12	9	9	9	9	9	9	9	9	9	
1,695 45	\$4,616 91	194 40	72 85	331 60	\$598 85	\$703 40	2,122 77	670 94	1,558 21	2,476 39	14,259 19	:				:		:	:		\$21,790 90
61 46	\$175 21	:	4 79	809	\$10 87	:	14 33	14 30	72 00	91 05	384 00				:		:	:	:	:	\$575 68
749 38	\$1,624 25	99 99	24 00	20 00	\$140 66	\$258 89	458 35	221 23	950 00	1,053 09	4,365 07								:		\$7,306 63 \$575 68 \$21,790 90
884 61	\$2,817 45	127 74	44 06	275 52	\$447 32	\$444 51	1,650 09	435 41	536 21	1,332 25	9,510 12		:								3,901 \$13,908 59
419	1,071	9	16	40	62	88	257	140	190	208	2,269	53	53	55	51	54	3	51	34	54	3,901
<u></u>	00	10	10	10	10	12	<u>C1</u>	2	27	12	12	30	10	00	00	×	10	30	00	00	-
Hyde Park.	:	ster.	ster.	ster,	:	City Proper.	City Proper.	roper.	oper.	oper.	oston.	ston.	oston.	soston.	30ston.	3oston.	soston.	soston.	soston.	oston.	
Ну		Dorchester,	Dorchester.	Dorchester,	:	City]	City 1	City Proper.	City Proper.	City Proper.	South Boston.	South Boston,	South Boston.	South Boston.	South Boston,	South Boston.					
Arlington street Between Providence street and Hy Hyde Park avenue	Totals	At Southern Artery Dorche	Verdun street From Southern Artery Dorche	Carruth street At Southern Artery Dorche	Total	West Newton street Over railroad bridge (7ty ]	Mason street Between Avery and West streets Gity I	Grenville place From Columbus avenue City P	Between Boylston and Eliot streets. City Pr	Between Tremont and Stuart streets. City Pro	Between Bell Court and West South B Second street.	Across D street South Bo	Across D street South B	Across D street South E	Across D street South 1	Across D street South 1	Across D street South E	Across D street South E	Across D street South E	Across D street South B	Carried forward

Cost of Replacement of Main Pipe. - Concluded.

			-	-			-			
Зтвет.	Location.	District.	CInch.)	Size. (Inch.)	Cost of Depart- ment Materials, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Original Size.	Remarks,
	Brought forward		:	3,901	3,901 \$13,908 59	\$7,306 63		\$575 68 \$21,790 90	-	
Southern Artery	South side, between Dorchester avenue and Adams street.	Dorchester.	12	505	\$1,996 00	\$1,213 97	\$79 42	\$3,289 39	112	12 Public, under construction.
Hubbard street	From Savin Hill avenue	Dorchester.	12	171	686 27	627 24	51 59	1,365 10	12	12 Private, rock.
Winston road	From Willowwood street	Dorchester.	12	178	673 20	393 20	46 75	1,113 15	9	6 Public, under construction.
Morton street	Between Evans and Fairmount streets.	Dorebester.	21	344	148 24	1,065 33	118 60	1,632 17	12	12 Public, rock, under construction.
Southern Artery	Between Adams street and Granite avenue.	Dorehester.	27	S02	1,993 12	1,186 29	66 21	3,245 62	12	Public, under construction.
Morton street	Between Fuller and Fairmount streets.	Dorchester.		168	116 30	155 69	:	571 99	13	Public, under construction.
Adams street	At No. 1109.	Dorehester.	2	16	206 27	94 41	16 50	317 18	12	Public, clay.
Granite avenue	At Adams street and Southern Artery.	Dorchester.	2	500	758 48	303 38	49 52	1,111 38	11	Public, under construction.
Walworth street	At Auburn street	West Roxbury.	13	6	92 19	00 09	4 20	156 39	12	12 Private, clay.
Adamson street	Between Everett and Franklin streets.	Brighton.	13	1,166	3,357 12	2,640 53	00 69	6,066 65	12	Public, sand and gravel.
Belnel road	At Hopewell road	Hyde Park.	15	22	22 39	52 00	12 14	86 53	12	12 Private, gravel.

6 Public, rock and gravel.	12 Public, under construction.	6 Publie, clay.	6 Public, gravel.	6 Public, clay.	Public, clay.	4 Public, clay.	6 Public, gravel and sand.	Public, clay.		24 Public, under construction.
9	12	9	9	9	4	7	9	+		çı
6,905 16	3,245 62	1,117 25	1,788 87	713 32	3,966 09	2,796 76	3,266 55	1,746 27	12 12,762 \$40,217 04 \$24,312 93 \$1,762.37 \$66,292 34	\$9,032 90
140 50	66 21	49 84	65 57	30 35	46 17	109 26	112 46	52 10	32.37	5 92
									\$1,7	\$46
3,013 68	1,186 29	322 55	527 55	229 49	1,341 10	813 13	983 85	196 62	\$24,312 93	\$2,124 10 \$465 92
3,750 98	1,993 12	744 86	1,195 75	153 48	2,578 82	1,874-37	2,170 24	1,197 25	7 04	88
3,75	1,99	7.4	1,19	÷	2,57	1,87	2,17	1,19	10,21	\$6,442 88
12 1,225	802	230	330	182	938	520	989	361	12,762	750
21	51	15	12	12	12	15	12	11	12	24
Hyde Park	Dorehester.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.	Hyde Park.		City Proper.
Between River and Westminster streets.	mite	ets	ets	Lyde	Church	pur	and	and	:	)oek
stmir	Between Adams street and Granite avenue.	l stre	Between Child and Beaver streets	Between Sunnyside street and Hyde Park avenue.		avenue and	street	street and	:	I pur
ı We	et an	Chil	зеате	treet	and				:	reet i
r an	s stre	r and	and 1	sides	Franklin and	wood et.	Between Cleveland Glenwood avenue.	mpsor	:	ver st
Rive	Adam	Веаус	Child	ween Sunny ark avenue		ween Glenwo 'ranklin street.	Clev od av	Thorde str		Hano
etween streets.	avenue,	reen ]	reen (	reen S irk av	etween streets.	een ankli	reen	reen	Totals	etween   square,
Bety	Bety	Between Beaver and Child streets			Between streets.	Between Glenwood Franklin street.	Bety	Between Thompson Sunnyside street.	L	Between Hanover street and Dock square,
Metropolitan avenue	Southern Artery	Glenwood avenue	Cleveland street	Roxana street	Sunnyside street	Thompson street	Beaver street	Franklin street		Union street

Cost of Relocation of Main Pipe.

Remarks.	8 Public, clay.	8 Private, sand.	8 Public, under construction.	8 Private, gravel.	Public, rock and clay.		6 Public, gravel.	8 Public, gravel.		$\left. egin{aligned} 12 \\ 6 \end{aligned} \right\}$ Public, granite base.	12 Public, asphalt. 4 Public, asphalt.
Original Size (Inch.)	· ·	00	00	00	95		9	30	1	112	112
Total Cost.	\$252 04	764 46	109 61	28 60	801 86	\$1,986 57	\$400 28	351 03	\$751 31	\$319 09	2,696 28
Cost of Inspection.	\$40 21	9 11	:	3 99	36 42	\$89 73		:		\$6 39	114 84
Cost of Labor.	\$167 33	318 13	67 25	16 20	647 69	\$1,216 60	\$114 75	83 75	\$198 50	\$100 00	1,013 07
Cost of Department Materials, etc.	\$44 50	437 22	42 36	38 41	117 75	\$680 24	\$285 53	267 28	\$552 81	\$212 70	1,568 37
Feet.	178	220	21	12	330	761	92	65	141	35	398
Size. (Inch.)	- 00		00	-00	- 00	00	10	10	101	12	12
District.	Dorchester.	t Roxbury.	Brighton.	Hyde Park.	Hyde Park.	:	Dorchester.	Dorchester.	:	City Proper.	City Proper.
Α	Ď	Wes		144	щ	:	Д		:	Cit	
Location. D	Between Nevada street and Milton Do avenue.	Between Williams street and Brook West Roxbury.	At Euston road	At River street	Betweeen Randolph road and F. Violante street.	Totals	Between Allston and Nixon street Dover Dorchester Tunnel.	Between Wellesleypark and Waldeck D	Totals	Opposite Mt. Washington avenue Cit.	Between Exchange street and Merchants row.

8 Publie, under construction.	12 Public, macadam.	Publie, under construction.	12 Public, under construction.	12 Private, clay.	Public, gravel.	8 Public, gravel.	12 Public, gravel.	12 Public, macadam.	12 Publie, macadam.	Public, gravel.		20 Public, under construction.
		12			12					12		
1,048 97	223 85	1,127 51	204 83	362 40	487 49	3,494 66	577 98	451 95	537 27	3,341 34	\$454 16 \$14,873 62	\$1,309 91
84 51	:	75 95	:	12 78		65 84		:	:	93 85	\$454 16	\$84 18
175 48	110 07	692 29	87 46	331 77	122 25	1,057 41	140 75	50 63	353 38	1,622 61	\$5,857 17	\$1,191 04
788 98	113 78	359 27	117 37	17 85	365 24	2,371 41	437 23	401 32	183 89	1,624 88	\$8,562 29	\$34 69
173	94	285	13	200	98	729	109	160	191	518	3,074	620
12	12	12	13	12	12	12	12	12	12	12	12	20
Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	Dorchester.	West Roxbury.	Hyde Park.	Hyde Park.		Dorchester.
Between Granite and Lenoxdale avenues.	From Adams street	Between Washington street and Dorchester avenue (old Codman street.)	Near Washington street	From Southern Artery	Between Samoset and Melbourne streets.	Between Grayson street and Cushing Hill road.	At Waldeck street	Between Billings lane and Pond circle.	Over railroad bridge	Between Whitney park and Mather street.	Totals	Between Washington street and Dorchester avenue.
Southern Artery	Hillsdale street	Southern Artery	Codman street	Alieia road	Centre street	Southern Artery	Park street	Pond street	Fairmont avenue	River street		Southern Artery

### WATERWORKS STATISTICS.—CITY OF BOSTON.

FOR THE FISCAL YEAR ENDING DECEMBER 31, 1927.

### DISTRIBUTION.

Mains.

Kind of pipe: cast iron, wrought iron.
Size: 2-inch to 48-inch.
Extended, miles, 10.91.
Size, enlarged, miles, 1.84.
Total miles now in use, 935.23.
Public hydrants added, 128.
Public hydrants now in use, 10.601.
Stops gates added, 240.
Stop gates now in use, 14,336.
Stop gates smaller than 4-inch, 33.
Number of blow-offs, 728
Range of pressure on mains, 30 to 90 pounds.

### Service.

Kind of pipe and size, lead and lead lined: ½-inch to 2-inch cast iron. 2-inch to 12-inch, wrought iron and cement lined: ¾-inch to 2-inch. Extended feet, 45,911.
Total miles now in use, 628.51.
Service taps added, 1,920.
Total service taps now in use, 117,923.

### High Pressure Fire System Extension, 1927.

Appropriations to December 31,1927 Total expenditures to December 31, 1927 .		:	\$2,128,000 00 2,127,618 00
Balance unexpended December 31, 1927			\$382 00

# APPENDIX G.

# REPORT OF THE BOSTON AND CAMBRIDGE BRIDGE COMMISSION.

To the Honorable the Mayor.

SIR — As Commissioner for the City of Boston, I respectfully submit herewith the annual report of the Boston and Cambridge Bridge Commission for the year ending December 31, 1927.

The commission is composed of two members, one appointed by the Mayor of the City of Boston and the other by the Mayor of the city of Cambridge, under

provisions of chapter 467, Acts of 1898.

The commission has charge of the maintenance of the following-named bridges between Boston and Cambridge; Anderson, Longfellow Prison Point, River Street and Western Avenue to Cambridge. River Street Bridge and Western Avenue Bridge were returned to the control of the commission, after being rebuilt by the Metropolitan District Commission, on December 1, 1926.

As there is no separate appropriation made for the City of Boston's portion of the expenses of this commission, the same is taken from the appropriation for the Bridge and Ferry Division, Bridge Service. The amount expended during the fiscal year ending December 31, 1927, was \$16,496.35.

Anderson Bridge (over Charles River.)

The paving on the existing bridge, which is of wood block on concrete base, has had a considerable amount of repairs made to it. It is only a question of time when this paving will have to be relaid.

Longfellow Bridge (over Charles River).

By chapter 33 of the Acts of 1927 the name of Cambridge Bridge was changed to Longfellow Bridge.

# PRISON POINT BRIDGE.

The channelway under this bridge was blocked by the improvements being made by the Boston & Maine Railroad and no more boats will pass through the channelway. It is therefore advisable that the bridge be strengthened, a new flooring placed and a new type of surfacing laid so that the constant repairs and patching of this structure may be eliminated.

# RIVER STREET BRIDGE.

This bridge, a three-arched reinforced concrete bridge, with concrete paving, is now in the hands of this commission. There are no car tracks on this structure.

Western Avenue Bridge (to Cambridge.)

This bridge, a three-arched reinforced concrete bridge, with bituminous macadam paving, is now in the custody of this commission. This bridge has two street car tracks on it.

Respectfully submitted,

James H. Sullivan, Commissioner for the City of Boston.

Boston and Cambridge Bridges, Expenditures for the Year Ending December 31, 1927.

Being the Portion Paid by the City of Boston, Which is One Half of the Total Expenditure.

	Administration.	Anderson Bridge.	Cambridge Bridge.	Prison Point Bridge.	Cambridge Street- River Street Bridge.	Western Avenue Bridge.	Totals,
Salaries	\$250 00	\$850 00	\$3,094 67	\$2,854 88			<b>\$7,04</b> 9 55
Inspection		110 00	186 00	234 00	\$34 00	\$42 00	606 00
Repairs		655 60	2,674 11	2,134 54	21 21		5,485 46
Lumber				750 07			750 07
Light		298 75	1,513 56	2 79	255 00	274 41	2,344 51
Fuel				38 22			38 22
Supplies			89 22	24 00			113 22
Printing and stationery	14 07						14 07
Telephone and traveling expenses	95 25						95 25
Totals	\$359 32	\$1,914 35	\$7,557 56	\$6,038 50	\$310 21	\$316 41	\$16,496 35









